Report for Domain: unimi.it

Generated by Apollo

September 6, 2024

Contents

1 Summary of Findings

Below are some key statistics from the data provided:

- **Number of IPs**: 897
- **Number of Domains**: 1564
- **Number of Emails**: 83
- **Number of Resolved Hosts**: 1373
- **Number of Mail Servers**: 5
- **Number of URLs**: 60

2 IP Addresses found

Below is the list of IP addresses found:

- 159.149.118.160
- 159.149.119.119
- 159.149.118.175
- 159.149.117.250
- 159.149.116.13
- 159.149.116.128
- 159.149.53.241
- 159.149.119.20
- 159.149.118.133
- 159.149.117.145
- 159.149.117.208
- 159.149.205.60
- 159.149.119.27
- 159.149.117.12
- 159.149.116.188
- 159.149.118.20
- 159.149.53.248
- 159.149.117.11
- 159.149.118.107
- 159.149.116.113
- 159.149.106.182
- 159.149.119.146
- 159.149.117.32
- 159.149.119.112
- 159.149.117.199
- 159.149.116.145
- 159.149.117.177
- 159.149.117.142
- 159.149.118.119
- 159.149.119.108
- 159.149.53.34
- 52.101.68.29
- 159.149.107.115

- 159.149.116.234
- 185.221.216.115
- 159.149.130.182
- 159.149.119.171
- 159.149.117.143
- 159.149.118.23
- 159.149.147.136
- 159.149.133.61
- 159.149.117.101
- 159.149.130.136
- 159.149.117.253
- 159.149.116.160
- 159.149.118.116
- 159.149.118.246
- 159.149.119.126
- 159.149.116.237
- 159.149.119.129
- 159.149.117.179
- 159.149.116.205
- 159.149.147.114
- 90.147.167.18
- 159.149.107.116
- 159.149.118.105
- 159.149.133.208
- 159.149.119.132
- 159.149.53.243
- 159.149.117.188
- 159.149.53.250
- 159.149.53.224
- 159.149.30.18
- 159.149.130.189
- 159.149.116.127
- 159.149.103.62
- 159.149.117.17
- 159.149.53.144
- 159.149.117.205

- 159.149.147.185
- 159.149.119.163
- 159.149.130.90
- 159.149.118.147
- 159.149.116.182
- 159.149.116.167
- 159.149.119.110
- 159.149.116.161
- 159.149.47.38
- 159.149.119.100
- 159.149.53.33
- 159.149.53.239
- 159.149.116.20
- 159.149.44.60
- 159.149.117.162
- 159.149.53.207
- 159.149.119.148
- 159.149.116.148
- 159.149.104.164
- 159.149.116.11
- 159.149.117.109
- 159.149.118.118
- 159.149.116.156
- 159.149.118.172
- 159.149.96.86
- 159.149.145.2
- 159.149.117.134
- 159.149.119.13
- 159.149.116.143
- 159.149.117.155
- 159.149.53.190
- 159.149.116.105
- 159.149.119.182
- 159.149.45.97
- 159.149.118.188
- 159.149.118.190

- 159.149.116.12
- 159.149.116.114
- 159.149.117.111
- 10.3.100.2
- 159.149.119.158
- 159.149.85.2
- 159.149.53.246
- 159.149.116.172
- 159.149.53.245
- 159.149.70.130
- 78.47.83.247
- 159.149.116.240
- 159.149.118.187
- 159.149.119.204
- 159.149.118.193
- 159.149.118.195
- 159.149.117.24
- 159.149.116.111
- 159.149.117.27
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- 159.149.45.158
- 159.149.119.150
- 159.149.117.157
- 159.149.116.185
- 159.149.118.136
- 52.97.201.232
- 159.149.133.37
- 159.149.116.115
- 159.149.116.138
- 159.149.118.168
- 159.149.119.107
- 159.149.118.250
- 159.149.119.15
- 159.149.118.207
- 159.149.117.124
- 159.149.118.165

- 159.149.145.168
- 159.149.15.42
- 159.149.145.1
- 159.149.118.109
- 159.149.104.180
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- 159.149.104.140
- 159.149.118.178
- 159.149.102.166
- 35.247.66.204
- 159.149.118.30
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- 159.149.145.56

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- 159.149.105.177
- 159.149.118.137
- 35.156.224.161
- 159.149.133.149
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- 159.149.116.23
- 159.149.118.182
- 159.149.118.237
- 159.149.117.248
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- 159.149.147.194
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- 159.149.104.154
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- 159.149.118.184
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- 159.149.118.142
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- 159.149.117.116
- 159.149.116.141
- 159.149.145.216
- 104.18.36.224
- 159.149.117.117
- 159.149.116.112
- 159.149.15.26
- 159.149.119.152
- 35.158.227.33
- 159.149.119.188
- 159.149.47.56
- 104.18.11.29
- 159.149.117.147
- 159.149.129.169
- 159.149.53.196
- 159.149.118.115
- 104.18.10.29
- 159.149.118.173
- 159.149.119.14
- 159.149.119.173
- 159.149.52.198
- 159.149.53.145

- 159.149.116.120
- 159.149.116.202
- 159.149.119.186
- 159.149.119.180
- 159.149.116.103
- 159.149.119.166
- 159.149.117.172
- 159.149.116.244
- 159.149.103.52
- 159.149.116.179
- 159.149.104.131
- 159.149.118.111
- 159.149.117.166
- 159.149.129.211
- 159.149.117.128
- 159.149.104.155
- 159.149.116.132
- 159.149.53.186
- 159.149.116.126
- 159.149.53.247
- 159.149.119.197
- 159.149.129.222
- 159.149.145.169
- 159.149.119.105
- 159.149.116.180
- 159.149.15.53
- 159.149.105.69
- 159.149.116.133
- 159.149.118.148
- 18.195.28.187
- 159.149.116.22
- 52.59.135.101
- 159.149.10.88
- 159.149.119.121
- 159.149.118.212
- 159.149.118.33

- 159.149.119.179
- 159.149.118.126
- 159.149.117.161
- 159.149.145.167
- 159.149.117.174
- 159.149.117.136
- 159.149.116.210
- 159.149.116.171
- 159.149.129.170
- 159.149.117.103
- 35.199.181.187
- 159.149.119.120
- 159.149.119.177
- 159.149.117.138
- 159.149.118.196
- 18.200.39.12
- 159.149.103.15
- 159.149.117.139
- 159.149.10.104
- 159.149.118.241
- 192.84.138.53
- 159.149.47.227
- 159.149.118.167
- 159.149.106.185
- 159.149.215.39
- 159.149.117.140
- 159.149.119.247
- 159.149.119.118
- 159.149.119.31
- 159.149.116.201
- 159.149.53.104
- 159.149.118.189
- 159.149.53.221
- 159.149.118.194
- 159.149.46.84
- 159.149.119.167

3 Domain found

Below is the list of Domain found:

- 203-118-dhcp.agra.unimi.it
- calendar.unimi.it
- smtp.di.unimi.it
- cooml.di.unimi.it
- hue.bapherd.ricerca.sesar.di.unimi.it
- 174-116-dhcp.agra.unimi.it
- 138-117-dhcp.agra.unimi.it
- orari-be.unimi.it
- mangiarsileparole.unimi.it
- 197-117-dhcp.agra.unimi.it
- edg.cdl.unimi.it
- prenotazione.di.unimi.it
- calendar11.unimi.it
- 154-118-dhcp.agra.unimi.it
- calcolo.fisica.unimi.it
- master-veninie-novnc.laser.di.unimi.it
- bellettini.di.unimi.it
- 3-205.divsi.unimi.it
- farmacia.cdl.unimi.it
- bebras.di.unimi.it
- 184-119-dhcp.agra.unimi.it
- 192-116-dhcp.agra.unimi.it
- phdlog.cloudtest.di.unimi.it
- arcus.di.unimi.it
- dept.unimi.it
- icona.crc.unimi.it
- optlab.di.unimi.it
- 2Fphd.fisica.unimi.it
- master-contel-novnc.laser.di.unimi.it
- 190-119-dhcp.agra.unimi.it
- studente.unimi.it
- console.s3.ricerca.sesar.di.unimi.it
- grafana.cloud.di.unimi.it

- ecgs.cdl.unimi.it
- cdd-rappresentanti.fisica.unimi.it
- 123-118-dhcp.agra.unimi.it
- hwc2.net.ict.unimi.it
- calendar-dr.unimi.it
- idp34.staging.unimi.it
- farmacognosia.unimi.it
- bitwardentest.di.unimi.it
- 173-118-dhcp.agra.unimi.it
- nix-cache.ricerca.sesar.di.unimi.it
- sesar.di.unimi.it
- 145-119-dhcp.agra.unimi.it
- masterdh.unimi.it
- gab.unimi.it
- telelavoro.unimi.it
- mailserver02.unimi.it
- portainer.laser.di.unimi.it
- spdp.di.unimi.it
- roundcube.di.unimi.it
- 169-116-dhcp.agra.unimi.it
- mediazione-k21.cdl.unimi.it
- aferrarair.ariel.ctu.unimi.it
- sp-ex-pwn-2-61acc51e.laser.di.unimi.it
- 119-118-dhcp.agra.unimi.it
- 188-118-dhcp.agra.unimi.it
- 208-116-dhcp.agra.unimi.it
- fastutil.di.unimi.it
- noto-sm100.phmgt.unimi.it
- ines.unimi.it
- 155-117-dhcp.agra.unimi.it
- sender7.unimi.it
- notify.unimi.it
- webmail09.unimi.it
- 190-118-dhcp.agra.unimi.it
- rnakgview.anacleto.di.unimi.it
- traefik-epyc.laser.di.unimi.it

- fuellab.unimi.it
- fdp7-sm3-sm100.phmgt.unimi.it
- cas.unimi.it
- webmail.fisica.unimi.it
- collezioni.unimi.it
- unibackup.unimi.it
- seclab.dti.unimi.it
- 105-117-dhcp.agra.unimi.it
- ssrionline.unimi.it
- test.cloudtest.di.unimi.it
- 199-117-dhcp.agra.unimi.it
- 254-117-statico.agra.unimi.it
- unimix3.unimi.it
- 175-118-dhcp.agra.unimi.it
- helpdesk.unimi.it
- 205-119-dhcp.agra.unimi.it
- events.api.di.unimi.it
- 204-118-dhcp.agra.unimi.it
- 180-118-dhcp.agra.unimi.it
- an-icon.unimi.it
- 176-117-dhcp.agra.unimi.it
- dwtest.di.unimi.it
- 129-116-dhcp.agra.unimi.it
- air.unimi.it
- datascience.di.unimi.it
- iqis2019.fisica.unimi.it
- servicecatalogue.unimi.it
- giurisprudenza.cdl.unimi.it
- mie.unimi.it
- centrozootecnico.unimi.it
- 178-117-dhcp.agra.unimi.it
- esp.unimi.it
- webtools.fisica.unimi.it
- 238-118-statico.agra.unimi.it
- accessi.divsi.unimi.it
- 209-116-dhcp.agra.unimi.it

- albigna.divtlc.unimi.it
- masterprochemapi.unimi.it
- 13-119-statico.agra.unimi.it
- webauth.divtlc.unimi.it
- 27-116-dhcp.agra.unimi.it
- cusmibio-cosp.unimi.it
- registry.cloudstaff.di.unimi.it
- sweng.di.unimi.it
- 24-119-dhcp.agra.unimi.it
- 168-117-dhcp.agra.unimi.it
- pacsvet.unimi.it
- 198-117-dhcp.agra.unimi.it
- multimech.fisica.unimi.it
- law.di.unimi.it
- 201-119-dhcp.agra.unimi.it
- 125-116-dhcp.agra.unimi.it
- 28-119-dhcp.agra.unimi.it
- play4physio.di.unimi.it
- 27-119-dhcp.agra.unimi.it
- 137-116-dhcp.agra.unimi.it
- spettacolo.fisica.unimi.it
- algofeed.unimi.it
- mathup2425.mat.unimi.it
- 140-118-dhcp.agra.unimi.it
- dc02.ipa.di.unimi.it
- 182-116-dhcp.agra.unimi.it
- fmportal.divsi.unimi.it
- documentale.unimi.it
- 175-119-dhcp.agra.unimi.it
- intranet2.unimi.it
- 153-119-dhcp.agra.unimi.it
- mipol.unimi.it
- 179-116-dhcp.agra.unimi.it
- webmail10.unimi.it
- 120-116-dhcp.agra.unimi.it
- box.noto.unimi.it

- rustdesk.di.unimi.it
- 133-117-dhcp.agra.unimi.it
- 28-117-dhcp.agra.unimi.it
- eng.dbs.unimi.it
- servicemanagement.unimi.it
- souris.ricerca.di.unimi.it
- biotecnologiemediche.cdl.unimi.it
- srv-moodle-4.ctu.unimi.it
- 185-119-dhcp.agra.unimi.it
- heimdall.srvtlc.unimi.it
- 183-117-dhcp.agra.unimi.it
- ewc1.net.ict.unimi.it
- 170-116-dhcp.agra.unimi.it
- disaapress.unimi.it
- collaboration.unimi.it
- dairysmart.unimi.it
- 29-116-dhcp.agra.unimi.it
- 3-105.divsi.unimi.it
- 236-116-statico.agra.unimi.it
- presenze.unimi.it
- ccnbnas.fisica.unimi.it
- phd.fisica.unimi.it
- 3cfuinformatica.unimi.it
- col46-eqmgt.phmgt.unimi.it
- 141-118-dhcp.agra.unimi.it
- 192-118-dhcp.agra.unimi.it
- oramigis.unimi.it
- 153-116-dhcp.agra.unimi.it
- 199-119-dhcp.agra.unimi.it
- 204-117-dhcp.agra.unimi.it
- postlaureaonline.unimi.it
- 201-116-dhcp.agra.unimi.it
- connets.di.unimi.it
- formazioneonline.unimi.it
- ims.di.unimi.it
- 183-116-dhcp.agra.unimi.it

- 121-117-dhcp.agra.unimi.it
- 117-118-dhcp.agra.unimi.it
- ofaonline.unimi.it
- mailserver01.unimi.it
- 207-116-dhcp.agra.unimi.it
- 3-94.divsi.unimi.it
- misom.unimi.it
- eng.dept.unimi.it
- gitlab.di.unimi.it
- 127-116-dhcp.agra.unimi.it
- 15-119-statico.agra.unimi.it
- 121-116-dhcp.agra.unimi.it
- abbreviazioni.unimi.it
- broker.cloudtest.di.unimi.it
- 148-116-dhcp.agra.unimi.it
- 203-119-dhcp.agra.unimi.it
- jhub.ricerca.sesar.di.unimi.it
- 118-118-dhcp.agra.unimi.it
- 210-118-dhcp.agra.unimi.it
- 242-118-statico.agra.unimi.it
- trm.cdl.unimi.it
- mailserver.unimi.it
- nextcloud.laser.di.unimi.it
- progettopalmira.unimi.it
- 166-117-dhcp.agra.unimi.it
- 161-116-dhcp.agra.unimi.it
- 101-116-dhcp.agra.unimi.it
- 179-117-dhcp.agra.unimi.it
- centrorusso.unimi.it
- 118-119-dhcp.agra.unimi.it
- 147-116-dhcp.agra.unimi.it
- assistenzasanitaria.cdl.unimi.it
- smartbear-it.di.unimi.it
- 159-117-dhcp.agra.unimi.it
- 16-117-dhcp.agra.unimi.it
- 213-119-dhcp.agra.unimi.it

- unimi-aads.phmgt.unimi.it
- 31-119-dhcp.agra.unimi.it
- germoplasmatest.sesar.di.unimi.it
- environsci.unimi.it
- masterdsebf.di.unimi.it
- minio.ricerca.sesar.di.unimi.it
- unimia.unimi.it
- cct.islab.di.unimi.it
- dcarusob.ariel.ctu.unimi.it
- islab.dico.unimi.it
- 132-119-dhcp.agra.unimi.it
- 172-118-dhcp.agra.unimi.it
- wpes2021.di.unimi.it
- cloudtest.di.unimi.it
- 106-117-dhcp.agra.unimi.it
- tino2.fisica.unimi.it
- 146-117-dhcp.agra.unimi.it
- smtp.unimi.it
- prestitoapi.cloudtest.di.unimi.it
- 33-119-dhcp.agra.unimi.it
- grafana.laser.di.unimi.it
- tirocini.di.unimi.it
- wb-test.srv.ict.unimi.it
- unimix1.unimi.it
- studenti.fisica.unimi.it
- icona.di.unimi.it
- ggobors.ariel.ctu.unimi.it
- influxdb.laser.di.unimi.it
- 126-117-dhcp.agra.unimi.it
- 100-118-dhcp.agra.unimi.it
- 170-117-dhcp.agra.unimi.it
- insdbdemo.fisica.unimi.it
- col46-ce-sm100.phmgt.unimi.it
- cookiepolicy.di.unimi.it
- 186-117-dhcp.agra.unimi.it
- 118-116-dhcp.agra.unimi.it

- arkive.unimi.it
- vpnguest.unimi.it
- cazzola.di.unimi.it
- cimeamilano.unimi.it
- 247-119-statico.agra.unimi.it
- santini.docenti.di.unimi.it
- wireguard.laser.di.unimi.it
- col46-eqms01.phmgt.unimi.it
- 32-117-dhcp.agra.unimi.it
- 102-117-dhcp.agra.unimi.it
- devel.di.unimi.it
- 116-118-dhcp.agra.unimi.it
- 160-117-dhcp.agra.unimi.it
- 180-116-dhcp.agra.unimi.it
- smartbear.di.unimi.it
- 20-118-dhcp.agra.unimi.it
- sicurezzainformaticaonline.di.unimi.it
- rgw.fisica.unimi.it
- informastudenti.unimi.it
- 21-118-dhcp.agra.unimi.it
- 178-118-dhcp.agra.unimi.it
- fievel.anacleto.di.unimi.it
- 214-118-dhcp.agra.unimi.it
- security.dico.unimi.it
- 122-118-dhcp.agra.unimi.it
- master-vivianim-novnc.laser.di.unimi.it
- xavier.ricerca.di.unimi.it
- 240-116-statico.agra.unimi.it
- arielb.ctu.unimi.it
- spaziofilosofico.filosofia.unimi.it
- manualesapori.unimi.it
- 234-116-statico.agra.unimi.it
- api.arcus.di.unimi.it
- 158-118-dhcp.agra.unimi.it
- neverlang.di.unimi.it
- 185-116-dhcp.agra.unimi.it

- myc3place.di.unimi.it
- 23-116-dhcp.agra.unimi.it
- 125-119-dhcp.agra.unimi.it
- xdams.lib.unimi.it
- collezioni.lib.unimi.it
- liste.unimi.it
- 210-116-dhcp.agra.unimi.it
- musicstudio.lim.di.unimi.it
- stickybeak.cybersecurity.unimi.it
- lastatalejobs.unimi.it
- ns.unimi.it
- authentik.ricerca.sesar.di.unimi.it
- mipoladmin.unimi.it
- master-barzaghib-novnc.laser.di.unimi.it
- teaching.basilico.di.unimi.it
- disaa-tirocini-tesi.unimi.it
- 214-119-dhcp.agra.unimi.it
- 124-118-dhcp.agra.unimi.it
- empatia.di.unimi.it
- 13-116-statico.agra.unimi.it
- 183-118-dhcp.agra.unimi.it
- 160-116-dhcp.agra.unimi.it
- 152-116-dhcp.agra.unimi.it
- boccignone.di.unimi.it
- dataloading.bapherd.ricerca.sesar.di.unimi.it
- 151-119-dhcp.agra.unimi.it
- ssrionline.di.unimi.it
- eng.esp.unimi.it
- aisticket.aislab.di.unimi.it
- eval1-ca.unimi.it
- timelapse.unimi.it
- 148-117-dhcp.agra.unimi.it
- socialcampus.di.unimi.it
- testing.aislab.di.unimi.it
- gp3.cybersecurity.unimi.it
- genovese.di.unimi.it

- 172-116-dhcp.agra.unimi.it
- col46-sm100.phmgt.unimi.it
- sansone.crema.unimi.it
- dantona.di.unimi.it
- 197-116-dhcp.agra.unimi.it
- island.ricerca.di.unimi.it
- ciriani.di.unimi.it
- oldidp.unimi.it
- 153-118-dhcp.agra.unimi.it
- 100-119-dhcp.agra.unimi.it
- broker.di.unimi.it
- accountstest.di.unimi.it
- 28-118-dhcp.agra.unimi.it
- 166-118-dhcp.agra.unimi.it
- 106-118-dhcp.agra.unimi.it
- 193-117-dhcp.agra.unimi.it
- eduroam.unimi.it
- 186-116-dhcp.agra.unimi.it
- specialpcbc.unimi.it
- esamionline.unimi.it
- 165-117-dhcp.agra.unimi.it
- eca2.net.ict.unimi.it
- 126-118-dhcp.agra.unimi.it
- 164-119-dhcp.agra.unimi.it
- unimibox.unimi.it
- unicloudidattica.unimi.it
- spotigem.lim.di.unimi.it
- xorshift.di.unimi.it
- unipredweb.di.unimi.it
- 246-118-statico.agra.unimi.it
- cdd.fisica.unimi.it
- 211-118-dhcp.agra.unimi.it
- iebil.di.unimi.it
- 120-119-dhcp.agra.unimi.it
- 170-119-dhcp.agra.unimi.it
- patrimonioold.di.unimi.it

- grafana.ricerca.sesar.di.unimi.it
- lifesciences.unimi.it
- bacheca.fisica.unimi.it
- 156-116-dhcp.agra.unimi.it
- 162-116-dhcp.agra.unimi.it
- 144-119-dhcp.agra.unimi.it
- laser.di.unimi.it
- hdfs.ricerca.sesar.di.unimi.it
- 179-118-dhcp.agra.unimi.it
- 236-118-statico.agra.unimi.it
- esami-01.esami.di.unimi.it
- 128-116-dhcp.agra.unimi.it
- whoami.cloud.di.unimi.it
- czds.unimi.it
- gp4.cybersecurity.unimi.it
- vaultwarden.laser.di.unimi.it
- fastutil.dsi.unimi.it
- dagliano.unimi.it
- discco.unimi.it
- archivi.lib.unimi.it
- marchi.ricerca.di.unimi.it
- 157-117-dhcp.agra.unimi.it
- traefik.cloudtest.di.unimi.it
- bitwarden.di.unimi.it
- prestito.cloudtest.di.unimi.it
- voip.unimi.it
- 241-118-statico.agra.unimi.it
- eval1-wcs.unimi.it
- aqm4.fisica.unimi.it
- webmail12.unimi.it
- bertoni.di.unimi.it
- osservatoriodisabilita.unimi.it
- unipredtest.di.unimi.it
- biosciences.unimi.it
- 145-117-dhcp.agra.unimi.it
- sux4j.di.unimi.it

- 211-116-dhcp.agra.unimi.it
- ludovico.lim.di.unimi.it
- 195-118-dhcp.agra.unimi.it
- 171-116-dhcp.agra.unimi.it
- museovirtuale.unimi.it
- 34-119-dhcp.agra.unimi.it
- delletto.fisica.unimi.it
- neurofisiopatologia.cdl.unimi.it
- calamperetestapi.di.unimi.it
- costruzionirurali.unimi.it
- prng.di.unimi.it
- 111-117-dhcp.agra.unimi.it
- 107-116-dhcp.agra.unimi.it
- ceridap.unimi.it
- 11-117-statico.agra.unimi.it
- wp-temp.fisica.unimi.it
- 212-117-dhcp.agra.unimi.it
- 155-118-dhcp.agra.unimi.it
- 139-118-dhcp.agra.unimi.it
- colorist.di.unimi.it
- sp-ex-pwn-1-a01gk49f.laser.di.unimi.it
- dse.unimi.it
- avvisi.di.unimi.it
- datasciencelab.unimi.it
- hesabu.fisica.unimi.it
- 201-118-dhcp.agra.unimi.it
- lanzarotti.di.unimi.it
- mailserver04.unimi.it
- chain.unimi.it
- ordinidipchi.unimi.it
- programmi.unimi.it
- 121-118-dhcp.agra.unimi.it
- ewnas.di.unimi.it
- 23-118-dhcp.agra.unimi.it
- archivi-2.unimi.it
- 252-117-statico.agra.unimi.it

- network.di.unimi.it
- prometheus.cloud.di.unimi.it
- opac.unimi.it
- glitter.di.unimi.it
- 137-118-dhcp.agra.unimi.it
- 120-117-dhcp.agra.unimi.it
- unimix2.unimi.it
- 138-116-dhcp.agra.unimi.it
- phabtest.divsi.unimi.it
- 13-117-statico.agra.unimi.it
- culthum.unimi.it
- 103-116-dhcp.agra.unimi.it
- tutoraggio.di.unimi.it
- preappuntamenti.informastudenti.unimi.it
- 148-119-dhcp.agra.unimi.it
- 136-118-dhcp.agra.unimi.it
- 191-116-dhcp.agra.unimi.it
- expertise.unimi.it
- 194-118-dhcp.agra.unimi.it
- traefik.k8s.di.unimi.it
- smartpen.aislab.di.unimi.it
- 21-116-dhcp.agra.unimi.it
- unistem.unimi.it
- 143-116-dhcp.agra.unimi.it
- 135-119-dhcp.agra.unimi.it
- phd.cloudtest.di.unimi.it
- pop.di.unimi.it
- jupiter.aislab.di.unimi.it
- eesms2010.di.unimi.it
- everywarelab.di.unimi.it
- 136-117-dhcp.agra.unimi.it
- master-user4-novnc.laser.di.unimi.it
- 200-118-dhcp.agra.unimi.it
- collezioni-1.unimi.it
- eccm.cdl.unimi.it
- 143-118-dhcp.agra.unimi.it

- com.unimi.it
- 180-119-dhcp.agra.unimi.it
- 134-116-dhcp.agra.unimi.it
- smtp-dr.unimi.it
- ml4pm2023.di.unimi.it
- 112-116-dhcp.agra.unimi.it
- 193-116-dhcp.agra.unimi.it
- collezioni-2.unimi.it
- cssa.unimi.it
- digitcult.lim.di.unimi.it
- ricercamix.unimi.it
- anacleto.di.unimi.it
- 161-117-dhcp.agra.unimi.it
- 131-117-dhcp.agra.unimi.it
- 24-118-dhcp.agra.unimi.it
- 126-116-dhcp.agra.unimi.it
- 202-117-dhcp.agra.unimi.it
- portainer.cloud.di.unimi.it
- acip.unimi.it
- aladdin.di.unimi.it
- 114-119-dhcp.agra.unimi.it
- 150-119-dhcp.agra.unimi.it
- viticolturaenologia.cdl.unimi.it
- 138-118-dhcp.agra.unimi.it
- 174-117-dhcp.agra.unimi.it
- 200-117-dhcp.agra.unimi.it
- unimix4.unimi.it
- bookcity.unimi.it
- guest.unimi.it
- 152-119-dhcp.agra.unimi.it
- someni.di.unimi.it
- portainer.eduvirt.di.unimi.it
- podologia.cdl.unimi.it
- registrazione.unimi.it
- sgp2019.di.unimi.it
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- 163-116-dhcp.agra.unimi.it
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- 131-118-dhcp.agra.unimi.it
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- 143-117-dhcp.agra.unimi.it
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- 113-118-dhcp.agra.unimi.it
- 170-118-dhcp.agra.unimi.it
- patrimonio.di.unimi.it
- esami-02.esami.di.unimi.it
- prestito.di.unimi.it
- core.harbor.ricerca.sesar.di.unimi.it
- 116-119-dhcp.agra.unimi.it
- 146-119-dhcp.agra.unimi.it
- 107-117-dhcp.agra.unimi.it

- 243-116-statico.agra.unimi.it
- sliver.docenti.di.unimi.it
- spazididattici.unimi.it
- escapes.unimi.it
- vpngate.fisica.unimi.it
- 207-118-dhcp.agra.unimi.it
- 104-116-dhcp.agra.unimi.it
- info.fisica.unimi.it
- diogene.cybersecurity.unimi.it
- 171-118-dhcp.agra.unimi.it
- dialects.changes.lim.di.unimi.it
- 129-118-dhcp.agra.unimi.it
- unitech.unimi.it
- 119-117-dhcp.agra.unimi.it
- ipatest.api.di.unimi.it
- ercshare.unimi.it
- 104-119-dhcp.agra.unimi.it
- ctu.unimi.it
- drupal-prod.divsi.unimi.it
- efforts.unimi.it
- archivi.unimi.it
- spoc.unimi.it
- 11-118-statico.agra.unimi.it
- webmail.laser.di.unimi.it
- 166-116-dhcp.agra.unimi.it
- random.di.unimi.it
- 253-118-statico.agra.unimi.it
- minerva.unimi.it
- api.arcus.unimi.it
- suatp.cdl.unimi.it
- 29-118-dhcp.agra.unimi.it
- mta-sts.laser.di.unimi.it
- 156-117-dhcp.agra.unimi.it
- coding.lim.di.unimi.it
- 150-116-dhcp.agra.unimi.it
- gatus.ricerca.sesar.di.unimi.it

- 135-117-dhcp.agra.unimi.it
- myprint.unimi.it
- archivi-3.unimi.it
- mailserver03.unimi.it
- 28-116-dhcp.agra.unimi.it
- dottorato.di.unimi.it
- 212-119-dhcp.agra.unimi.it
- isr17.lic.di.unimi.it
- netdisco.fisica.unimi.it
- ims.cdl.unimi.it
- 113-117-dhcp.agra.unimi.it
- 215-119-dhcp.agra.unimi.it
- 118.di.unimi.it
- 124-117-dhcp.agra.unimi.it
- ricesmart.unimi.it
- homes.di.unimi.it
- cedfs.noto.unimi.it
- civitarese.di.unimi.it
- smart.nptlab.di.unimi.it
- mathup1819.mat.unimi.it
- prosn.lib.unimi.it
- cdl.unimi.it
- aladdinsrv.di.unimi.it
- 173-116-dhcp.agra.unimi.it
- 109-119-dhcp.agra.unimi.it
- 189-116-dhcp.agra.unimi.it
- 207-119-dhcp.agra.unimi.it
- 124-119-dhcp.agra.unimi.it
- 138-119-dhcp.agra.unimi.it
- 17-117-dhcp.agra.unimi.it
- 188-117-dhcp.agra.unimi.it
- 212-116-dhcp.agra.unimi.it
- ext.unimi.it
- api.accountstest.di.unimi.it
- 195-119-dhcp.agra.unimi.it
- 103-117-dhcp.agra.unimi.it

- piuri.di.unimi.it
- 19-119-dhcp.agra.unimi.it
- amhuse.phuselab.di.unimi.it
- erbario.lim.di.unimi.it
- wikirank-2017.di.unimi.it
- postlaurea.myariel.unimi.it
- piurilabs.di.unimi.it
- webgraph.dsi.unimi.it
- fileserver.laser.di.unimi.it
- 114-118-dhcp.agra.unimi.it
- sunfloat.unimi.it
- sforestiim.ariel.ctu.unimi.it
- vbellandipwm.ariel.ctu.unimi.it
- sumo.divtlc.unimi.it
- 167-118-dhcp.agra.unimi.it
- prinhealing.unimi.it
- ariel.ctu.unimi.it
- coro.unimi.it
- 123-116-dhcp.agra.unimi.it
- gps.unimi.it
- 202-119-dhcp.agra.unimi.it
- 253-117-statico.agra.unimi.it
- cosp.unimi.it
- fca-namirial.unimi.it
- 167-119-dhcp.agra.unimi.it
- omd.di.unimi.it
- learn.ctu.unimi.it
- passbolt.di.unimi.it
- contacts.unimi.it
- orchestra.unimi.it
- gp2.divtlc.unimi.it
- autoconfig.laser.di.unimi.it
- 196-116-dhcp.agra.unimi.it
- sid.unimi.it
- dbs.unimi.it
- alphaplus.dti.unimi.it

- prestitodb.cloudtest.di.unimi.it
- patrimoniotest.di.unimi.it
- contacts-dr.unimi.it
- test.laser.di.unimi.it
- forensics.unimi.it
- divas.dire.unimi.it
- 139-117-dhcp.agra.unimi.it
- 237-116-statico.agra.unimi.it
- 115-118-dhcp.agra.unimi.it
- gaia2050.unimi.it
- 18-119-dhcp.agra.unimi.it
- 134-117-dhcp.agra.unimi.it
- 104-118-dhcp.agra.unimi.it
- labdid4.fisica.unimi.it
- star1.agra.unimi.it
- 178-116-dhcp.agra.unimi.it
- 115-119-dhcp.agra.unimi.it
- 194-116-dhcp.agra.unimi.it
- delis.di.unimi.it
- 150-118-dhcp.agra.unimi.it
- filibusta.crema.unimi.it
- 151-118-dhcp.agra.unimi.it
- matbim2019.unimi.it
- 205-117-dhcp.agra.unimi.it
- 248-117-statico.agra.unimi.it
- sandbox.laser.di.unimi.it
- 173-117-dhcp.agra.unimi.it
- 19-117-dhcp.agra.unimi.it
- 252-118-statico.agra.unimi.it
- master-pigonia-novnc.laser.di.unimi.it
- vailati.unimi.it
- legato.lim.di.unimi.it
- prog2.di.unimi.it
- ceeds.unimi.it
- portalevideo.unimi.it
- 248-119-statico.agra.unimi.it

- 124-116-dhcp.agra.unimi.it
- cloud.chimica.unimi.it
- 169-117-dhcp.agra.unimi.it
- immagini.unimi.it
- hwc1.net.ict.unimi.it
- 105-118-dhcp.agra.unimi.it
- superset.bapherd.ricerca.sesar.di.unimi.it
- mathup2122.mat.unimi.it
- 159-116-dhcp.agra.unimi.it
- 181-116-dhcp.agra.unimi.it
- rubrica.di.unimi.it
- sux.di.unimi.it
- eca1.net.ict.unimi.it
- backoffice.museovirtuale.unimi.it
- 165-119-dhcp.agra.unimi.it
- master-frassonea-novnc.laser.di.unimi.it
- zulip.di.unimi.it
- cubase.lim.di.unimi.it
- 164-118-dhcp.agra.unimi.it
- arterussamilano.unimi.it
- traefik-mirco.laser.di.unimi.it
- sp7.unimi.it
- 253-119-statico.agra.unimi.it
- oldweb.laser.di.unimi.it
- 144-116-dhcp.agra.unimi.it
- siem.divtlc.unimi.it
- securemail.unimi.it
- 212-118-dhcp.agra.unimi.it
- mailergw.di.unimi.it
- migrate.di.unimi.it
- cybersecurity.master.di.unimi.it
- 209-117-dhcp.agra.unimi.it
- 202-116-dhcp.agra.unimi.it
- lspe.fisica.unimi.it
- 155-119-dhcp.agra.unimi.it
- centenario.unimi.it

- auth.di.unimi.it
- 31-116-dhcp.agra.unimi.it
- 174-118-dhcp.agra.unimi.it
- ml4pm2022.di.unimi.it
- cusmibio-prenota.unimi.it
- harmopicta.unimi.it
- 16-116-dhcp.agra.unimi.it
- ecare.unimi.it
- 108-119-dhcp.agra.unimi.it
- whoami.cloudtest.di.unimi.it
- calcoloweb.fisica.unimi.it
- 177-116-dhcp.agra.unimi.it
- unsee.cloud.di.unimi.it
- gender.unimi.it
- pwncollege-si.laser.di.unimi.it
- fmpc.ariel.ctu.unimi.it
- 177-118-dhcp.agra.unimi.it
- 15-116-statico.agra.unimi.it
- prinfs.noto.unimi.it
- crc-beniculturali.unimi.it
- eng.scienzegiuridiche.unimi.it
- sp-ex-pwn-1.laser.di.unimi.it
- ieee1599.lim.di.unimi.it
- 190-116-dhcp.agra.unimi.it
- bisp.di.unimi.it
- malchiodi.di.unimi.it
- 168-118-dhcp.agra.unimi.it
- 238-116-statico.agra.unimi.it
- ariel.unimi.it
- 169-118-dhcp.agra.unimi.it
- rsu.unimi.it
- dataverse.unimi.it
- helpdesk.divsi.unimi.it
- 185-118-dhcp.agra.unimi.it
- registry.di.unimi.it
- vaultwarden.ricerca.sesar.di.unimi.it

- wikirank-2020.di.unimi.it
- sp-ex-pwn-1-kfd7fr2.laser.di.unimi.it
- 10-119-statico.agra.unimi.it
- 252-119-statico.agra.unimi.it
- farmacia-cu.cdl.unimi.it
- fakenewsgame.islab.di.unimi.it
- 183-119-dhcp.agra.unimi.it
- adipascaledds.ariel.ctu.unimi.it
- support.demm.unimi.it
- upload.mat.unimi.it
- doku.di.unimi.it
- dc01.ipa.di.unimi.it
- oo.divsi.unimi.it
- changes.lim.di.unimi.it
- phdapi.cloudtest.di.unimi.it
- 119-119-dhcp.agra.unimi.it
- master-villanim-novnc.laser.di.unimi.it
- tracesofmobility.unimi.it
- sicurezzaonline.di.unimi.it
- 135-116-dhcp.agra.unimi.it
- 18-118-dhcp.agra.unimi.it
- 198-116-dhcp.agra.unimi.it
- magister.unimi.it
- mailserver05.unimi.it
- bmsl.di.unimi.it
- 109-116-dhcp.agra.unimi.it
- 205-118-dhcp.agra.unimi.it
- 109-117-dhcp.agra.unimi.it
- 127-119-dhcp.agra.unimi.it
- cewqo20.fisica.unimi.it
- videolezioni.unimi.it
- bioms2011.di.unimi.it
- climvib.unimi.it
- pm.di.unimi.it
- jerry.anacleto.di.unimi.it
- smtp04.unimi.it

- 140-117-dhcp.agra.unimi.it
- minio.bapherd.ricerca.sesar.di.unimi.it
- 137-117-dhcp.agra.unimi.it
- staging.unimi.it
- api.di.unimi.it
- 147-118-dhcp.agra.unimi.it
- mathup2021.mat.unimi.it
- nova.disfarm.unimi.it
- skynet.unimi.it
- tales.islab.di.unimi.it
- ojs2-riviste.unimi.it
- aac-wcs1.phmgt.unimi.it
- lastatalenews.unimi.it
- 104-117-dhcp.agra.unimi.it
- master-user2-novnc.laser.di.unimi.it
- webmail07.unimi.it
- 132-117-dhcp.agra.unimi.it
- ortibotanici.unimi.it
- idp.unimi.it
- contacts11.unimi.it
- 247-117-statico.agra.unimi.it
- xoshiro.di.unimi.it
- web.laser.di.unimi.it
- econ.cdl.unimi.it
- idragra.unimi.it
- portainer.di.unimi.it
- patrimoniotestapi.di.unimi.it
- 154-119-dhcp.agra.unimi.it
- prenotabiblio.sba.unimi.it
- repodip.fisica.unimi.it
- patrimoniotestadmindb.di.unimi.it
- appuntamenti.servicemanagement.unimi.it
- 209-119-dhcp.agra.unimi.it
- mailserver06.unimi.it
- 213-118-dhcp.agra.unimi.it
- whoami.k8s.di.unimi.it

- 171-117-dhcp.agra.unimi.it
- 181-118-dhcp.agra.unimi.it
- 32-116-dhcp.agra.unimi.it
- bispcloud.di.unimi.it
- traefik.cloudstaff.di.unimi.it
- 141-116-dhcp.agra.unimi.it
- unimi-test.unimi.it
- mathup1920.mat.unimi.it
- 198-119-dhcp.agra.unimi.it
- drupal-preprod.divsi.unimi.it
- 111-116-dhcp.agra.unimi.it
- 152-118-dhcp.agra.unimi.it
- ne.di.unimi.it
- 164-116-dhcp.agra.unimi.it
- intranetsvil.unimi.it
- corsoestivocorbella.unimi.it
- logicseminar.di.unimi.it
- s3domain.unimi.it
- 123-119-dhcp.agra.unimi.it
- 142-116-dhcp.agra.unimi.it
- ste.cdl.unimi.it
- 143-119-dhcp.agra.unimi.it
- prenotazione-new.di.unimi.it
- accessi.unimi.it
- 215-117-dhcp.agra.unimi.it
- ioi.di.unimi.it
- livinglab.di.unimi.it
- reda.unimi.it
- 12-118-statico.agra.unimi.it
- 172-119-dhcp.agra.unimi.it
- alertmanager.cloud.di.unimi.it
- ctf.cdl.unimi.it
- malchiodi.docenti.di.unimi.it
- counter.ricerca.sesar.di.unimi.it
- mpradali.ariel.ctu.unimi.it
- mameli.docenti.di.unimi.it

- acip.divsi.unimi.it
- germoplasma.unimi.it
- 120-118-dhcp.agra.unimi.it
- vpn.ctu.unimi.it
- hsdev.aislab.di.unimi.it
- mdm2013.dico.unimi.it
- api.accounts.di.unimi.it
- unimiboxtest.srvsi.unimi.it
- uploadapi.di.unimi.it
- appuntamenti.unimi.it
- 127-118-dhcp.agra.unimi.it
- 14-119-statico.agra.unimi.it
- 158-116-dhcp.agra.unimi.it
- drupal-stage.divsi.unimi.it
- corbellasummerschool.unimi.it
- gbtest.di.unimi.it
- 204-119-dhcp.agra.unimi.it
- 249-118-statico.agra.unimi.it
- patrimonioadmindb.di.unimi.it
- astro.fisica.unimi.it
- logbookveterinaria.unimi.it
- 20-116-dhcp.agra.unimi.it
- ssl.law.di.unimi.it
- spo.unimi.it
- dsiutils.di.unimi.it
- musicblockly.lim.di.unimi.it
- 125-117-dhcp.agra.unimi.it
- imap-dr.unimi.it
- 25-118-dhcp.agra.unimi.it
- 147-119-dhcp.agra.unimi.it
- traefikllama.laser.di.unimi.it
- calamperetest.di.unimi.it
- docusvil.divsi.unimi.it
- mail.di.unimi.it
- master-lefossem-novnc.laser.di.unimi.it
- 122-119-dhcp.agra.unimi.it

- 182-117-dhcp.agra.unimi.it
- servizi.di.unimi.it
- colldid.fisica.unimi.it
- 105-116-dhcp.agra.unimi.it
- lam.unimi.it
- sp-ex-pwn-2.laser.di.unimi.it
- 114-117-dhcp.agra.unimi.it
- tirociniapi.di.unimi.it
- webmail06.unimi.it
- master-lembog-novnc.laser.di.unimi.it
- webgraph.di.unimi.it
- 193-118-dhcp.agra.unimi.it
- 18-116-dhcp.agra.unimi.it
- 151-116-dhcp.agra.unimi.it
- 163-118-dhcp.agra.unimi.it
- master-loritod-novnc.laser.di.unimi.it
- imap.di.unimi.it
- 159-119-dhcp.agra.unimi.it
- iple.unimi.it
- 110-118-dhcp.agra.unimi.it
- 196-119-dhcp.agra.unimi.it
- h2022.fisica.unimi.it
- 215-116-dhcp.agra.unimi.it
- spa.cdl.unimi.it
- 31-117-dhcp.agra.unimi.it
- 177-117-dhcp.agra.unimi.it
- 195-117-dhcp.agra.unimi.it
- 33-118-dhcp.agra.unimi.it
- eng.matematica.unimi.it
- longhorn.ricerca.sesar.di.unimi.it
- 211-117-dhcp.agra.unimi.it
- studenti.unicloudidattica.unimi.it
- 21-117-dhcp.agra.unimi.it
- razzelombarde.unimi.it
- whistleblowing.unimi.it
- easystaff.divsi.unimi.it

- istitutoconfucio.unimi.it
- 12-116-statico.agra.unimi.it
- 131-119-dhcp.agra.unimi.it
- 146-116-dhcp.agra.unimi.it
- 108-118-dhcp.agra.unimi.it
- 208-118-dhcp.agra.unimi.it
- 173-119-dhcp.agra.unimi.it
- 113-116-dhcp.agra.unimi.it
- 154-117-dhcp.agra.unimi.it
- 139-119-dhcp.agra.unimi.it
- wolfgang.lim.di.unimi.it
- polcrises.unimi.it
- veterinaria.cdl.unimi.it
- dcfs2017.di.unimi.it
- smtp01.unimi.it
- 194-119-dhcp.agra.unimi.it
- mermaid.unimi.it
- webmail11.unimi.it
- scaffale.divtlc.unimi.it
- 144-118-dhcp.agra.unimi.it
- 214-116-dhcp.agra.unimi.it
- 107-119-dhcp.agra.unimi.it
- apps.unimi.it
- 188-116-dhcp.agra.unimi.it
- tirocinitest.di.unimi.it
- easy40.di.unimi.it
- irisplurilingua.unimi.it
- gab7.unimi.it
- qtech.fisica.unimi.it
- vpnmanutenzione.unimi.it
- bibliotecamattioli.unimi.it
- contacts12.unimi.it
- 27-117-dhcp.agra.unimi.it
- intranet.di.unimi.it
- 199-118-dhcp.agra.unimi.it
- patrimonioapi.di.unimi.it

- webmail08.unimi.it
- sol.unimi.it
- rhev-manager.unicloudidattica.unimi.it
- ulisse.fisica.unimi.it
- 243-118-statico.agra.unimi.it
- 189-117-dhcp.agra.unimi.it
- 115-116-dhcp.agra.unimi.it
- oo.srvsi.unimi.it
- 136-116-dhcp.agra.unimi.it
- datagovernance.unimi.it
- 156-119-dhcp.agra.unimi.it
- 129-119-dhcp.agra.unimi.it
- 108-116-dhcp.agra.unimi.it
- cgil.unimi.it
- 30-118-dhcp.agra.unimi.it
- master-parruccir-novnc.laser.di.unimi.it
- 161-118-dhcp.agra.unimi.it
- 139-116-dhcp.agra.unimi.it
- 214-117-dhcp.agra.unimi.it
- cbac.aislab.di.unimi.it
- 31-118-dhcp.agra.unimi.it
- 142-119-dhcp.agra.unimi.it
- 157-116-dhcp.agra.unimi.it
- borghese.di.unimi.it
- magritte.divtlc.unimi.it
- account.di.unimi.it
- activesync.unimi.it
- pupunimi.unimi.it
- cloud.di.unimi.it
- humanhall.unimi.it
- drupal-dev.divsi.unimi.it
- databroker.cloudtest.di.unimi.it
- minatore.divtlc.unimi.it
- ibp2025.unimi.it
- 30-117-dhcp.agra.unimi.it
- sp-ex-pwn-1-dhf84ba.laser.di.unimi.it

- 140-119-dhcp.agra.unimi.it
- gp1.cybersecurity.unimi.it
- rescuemail.unimi.it
- sebinaweb.divsi.unimi.it
- cockpit.divtlc.unimi.it
- work.unimi.it
- 116-116-dhcp.agra.unimi.it
- ispnowp.srv.ict.unimi.it
- 186-118-dhcp.agra.unimi.it
- vr.aislab.di.unimi.it
- gab8.unimi.it
- corsoviolenzadigenere.unimi.it
- ayw2023.di.unimi.it
- 117-116-dhcp.agra.unimi.it
- 12-119-statico.agra.unimi.it
- pis.unimi.it
- masterdsebf.unimi.it
- argocd.ricerca.sesar.di.unimi.it
- appuntamenti.informastudenti.unimi.it

4 URLs found

Below is the list of URLs found:

- marchi.ricerca.di.unimi.it
- filibusta.crema.unimi.it
- tutoraggio.di.unimi.it
- www.mat.unimi.it
- anomalie.unimi.it
- harmopicta.unimi.it
- www.unimi.it
- minerva.unimi.it
- convegnodipchi.unimi.it
- accounts.di.unimi.it
- gpu.di.unimi.it
- rustdesk.di.unimi.it
- wikirank-2023.di.unimi.it
- ines.unimi.it
- matematica.unimi.it
- www.unimi.it
- fisica.unimi.it
- elearning.unimi.it
- www.vaccarilab.unimi.it
- vbellandipwm.ariel.ctu.unimi.it
- bibliotecamattioli.unimi.it
- elearning.unimi.it
- ecare.unimi.it
- timelapse.unimi.it
- gatus.ricerca.sesar.di.unimi.it
- postlaurea.myariel.unimi.it
- textgen.ricerca.sesar.di.unimi.it
- cas.unimi.it
- wikirank-2017.di.unimi.it
- wikirank-2020.di.unimi.it
- prenotazione-new.di.unimi.it
- authentik.ricerca.sesar.di.unimi.it
- www.unimi.it
- auth.di.unimi.it

- fastutil.di.unimi.it
- sp-ex-pwn-1-dhf84ba.laser.di.unimi.it
- elearning.unimi.it
- audioplugins.lim.di.unimi.it
- wizardunicloud.unimi.it
- pong.di.unimi.it
- www.centrorusso.unimi.it
- accountstest.di.unimi.it
- mediacomm.unimi.it
- orari-be.divsi.unimi.it
- rnakgview.anacleto.di.unimi.it
- security.di.unimi.it
- algofeed.unimi.it
- lam.cdl.unimi.it
- authentik.ricerca.sesar.di.unimi.it
- sites.unimi.it
- auth.unimi.it
- www.aislab.di.unimi.it
- unistem.unimi.it
- glossarioinclusione.unimi.it
- sites.unimi.it
- adminer.studenti.di.unimi.it
- ricesmart.unimi.it
- www.convegnodipchi.unimi.it
- delletto.fisica.unimi.it
- cas.unimi.it

5 Domain Related to URLs Found

Below is the list of Domains related to URLs found:

5.1 Domain: accounts.di.unimi.it

- accounts.di.unimi.it

5.2 Domain: accountstest.di.unimi.it

- accountstest.di.unimi.it

5.3 Domain: adminer.studenti.di.unimi.it

- adminer.studenti.di.unimi.it

5.4 Domain: algofeed.unimi.it

- algofeed.unimi.it

5.5 Domain: anacleto.di.unimi.it

- anacleto.di.unimi.it

5.6 Domain: anomalie.unimi.it

- anomalie.unimi.it

5.7 Domain: ariel.ctu.unimi.it

- ariel.ctu.unimi.it
- ariel.ctu.unimi.it

5.8 Domain: ariel.unimi.it

- ariel.unimi.it

5.9 Domain: audioplugins.lim.di.unimi.it

- audioplugins.lim.di.unimi.it

5.10 Domain: auth.di.unimi.it

- auth.di.unimi.it

5.11 Domain: auth.unimi.it

- auth.unimi.it

5.12 Domain: authentik.ricerca.sesar.di.unimi.it

- authentik.ricerca.sesar.di.unimi.it
- authentik.ricerca.sesar.di.unimi.it

5.13 Domain: bibliotecamattioli.unimi.it

- bibliotecamattioli.unimi.it

5.14 Domain: cas.unimi.it

- cas.unimi.it
- cas.unimi.it

5.15 Domain: cdl.unimi.it

- cdl.unimi.it

5.16 Domain: centrorusso.unimi.it

- centrorusso.unimi.it

5.17 Domain: convegnodipchi.unimi.it

- convegnodipchi.unimi.it
- convegnodipchi.unimi.it

5.18 Domain: ctu.unimi.it

- ctu.unimi.it
- ctu.unimi.it

5.19 Domain: delletto.fisica.unimi.it

- delletto.fisica.unimi.it

5.20 Domain: di.unimi.it

- di.unimi.it
- di.unimi.it
- di.unimi.it
- di.unimi.it
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- di.unimi.it
- di.unimi.it

5.21 Domain: ecare.unimi.it

- ecare.unimi.it

5.22 Domain: elearning.unimi.it

- elearning.unimi.it
- elearning.unimi.it
- elearning.unimi.it

5.23 Domain: fastutil.di.unimi.it

- fastutil.di.unimi.it

5.24 Domain: filibusta.crema.unimi.it

- filibusta.crema.unimi.it

5.25 Domain: fisica.unimi.it

- fisica.unimi.it
- fisica.unimi.it

5.26 Domain: gatus.ricerca.sesar.di.unimi.it

- gatus.ricerca.sesar.di.unimi.it

5.27 Domain: glossarioinclusione.unimi.it

- glossarioinclusione.unimi.it

5.28 Domain: gpu.di.unimi.it

- gpu.di.unimi.it

5.29 Domain: grafana.ricerca.sesar.di.unimi.it

- grafana.ricerca.sesar.di.unimi.it

5.30 Domain: harmopicta.unimi.it

- harmopicta.unimi.it

5.31 Domain: ines.unimi.it

- ines.unimi.it

5.32 Domain: islab.di.unimi.it

- islab.di.unimi.it

5.33 Domain: lam.cdl.unimi.it

- lam.cdl.unimi.it

5.34 Domain: laser.di.unimi.it

- laser.di.unimi.it

5.35 Domain: liste.unimi.it

- liste.unimi.it

5.36 Domain: marchi.ricerca.di.unimi.it

- marchi.ricerca.di.unimi.it

5.37 Domain: matematica.unimi.it

- matematica.unimi.it

5.38 Domain: mediacomm.unimi.it

- mediacomm.unimi.it

5.39 Domain: minerva.unimi.it

- minerva.unimi.it

5.40 Domain: myariel.unimi.it

- myariel.unimi.it

5.41 Domain: orari-be.divsi.unimi.it

- orari-be.divsi.unimi.it

5.42 Domain: pong.di.unimi.it

- pong.di.unimi.it

5.43 Domain: postlaurea.myariel.unimi.it

- postlaurea.myariel.unimi.it

5.44 Domain: postlaureaonline.unimi.it

- postlaureaonline.unimi.it

5.45 Domain: prenotazione-new.di.unimi.it

- prenotazione-new.di.unimi.it

5.46 Domain: pros1.lib.unimi.it

- pros1.lib.unimi.it

5.47 Domain: registrazione.unimi.it

- registrazione.unimi.it

5.48 Domain: ricesmart.unimi.it

- ricesmart.unimi.it

5.49 Domain: rnakgview.anacleto.di.unimi.it

- rnakgview.anacleto.di.unimi.it

5.50 Domain: rustdesk.di.unimi.it

- rustdesk.di.unimi.it

5.51 Domain: security.di.unimi.it

- security.di.unimi.it

5.52 Domain: sesar.di.unimi.it

- sesar.di.unimi.it
- sesar.di.unimi.it
- sesar.di.unimi.it
- sesar.di.unimi.it

5.53 Domain: sites.unimi.it

- sites.unimi.it
- sites.unimi.it

5.54 Domain: sp-ex-pwn-1-dhf84ba.laser.di.unimi.it

- sp-ex-pwn-1-dhf84ba.laser.di.unimi.it

5.55 Domain: textgen.ricerca.sesar.di.unimi.it

- textgen.ricerca.sesar.di.unimi.it

5.56 Domain: timelapse.unimi.it

- timelapse.unimi.it

5.57 Domain: tutoraggio.di.unimi.it

- tutoraggio.di.unimi.it

5.58 Domain: unistem.unimi.it

- unistem.unimi.it

5.59 Domain: vbellandipwm.ariel.ctu.unimi.it

- vbellandipwm.ariel.ctu.unimi.it

5.60 Domain: wikirank-2017.di.unimi.it

- wikirank-2017.di.unimi.it

5.61 Domain: wikirank-2020.di.unimi.it

- wikirank-2020.di.unimi.it

5.62 Domain: wikirank-2023.di.unimi.it

- wikirank-2023.di.unimi.it

5.63 Domain: wizardunicloud.unimi.it

- wizardunicloud.unimi.it

6 Emails found

Below is the list of Emails found:

- angelo.vanzulli@unimi.it
- anna.cariboni@unimi.it
- giussy.barbara@unimi.it
- nome.cognome@unimi.it
- antonia.franchini@unimi.it
- stage@unimi.it
- assegni.ricerca@unimi.it
- economics@unimi.it
- antiplagio@unimi.it
- alessia.lodico@unimi.it
- elvira.verduci@unimi.it
- paolo.brambilla1@unimi.it
- sebastiano.vigna@unimi.it
- angelo.marzano@unimi.it
- lucia.colombo@unimi.it
- giovanni.righini@unimi.it
- giuseppe.banderali@unimi.it
- giovanni.savoini@unimi.it
- francesca.bravi@unimi.it
- piercarlo.sarziputtini@unimi.it
- giovanna.magistrelli@unimi.it
- monica.cutugno@unimi.it
- gianluca.lopez@unimi.it
- eduroam@unimi.it
- redbiolab@unimi.it
- enza.dauria@unimi.it
- italian.courses@unimi.it
- culthum@unimi.it
- cristian.delbo@unimi.it
- caterina.laporta@unimi.it
- studiurp@unimi.it
- international.students@unimi.it
- dirse@unimi.it

- fabio.parazzini@unimi.it
- maria.longeri@unimi.it
- alessandro.leone1@unimi.it
- guasti.trp@unimi.it
- daniela.salvatore@unimi.it
- giuseppe.marano@unimi.it
- serena.oliveri@unimi.it
- agostino.riva@unimi.it
- doe@unimi.it
- maria.gianni@unimi.it
- andrea.barbuti@unimi.it
- antivirus@unimi.it
- mario.cozzolino@unimi.it
- chiara.dilorenzo@unimi.it
- giulia.fiore@unimi.it
- enrico.sangiovanni@unimi.it
- competenzelinguistiche.slam@unimi.it
- chiara.pirovano@unimi.it
- antonia.samore@unimi.it
- consultazioni.online@unimi.it
- angelica.bonfanti@unimi.it
- stefano.aliberti@unimi.it
- luca.sacchi@unimi.it
- ester.luconi@unimi.it
- fred.paxton@unimi.it
- nome.cognome@studenti.unimi.it
- jane@unimi.it
- lorenzo.brusetti@unimi.it
- marco.sartorio@unimi.it
- susanna.esposito@unimi.it
- francesco.blasi@unimi.it
- fabio.omodei@unimi.it
- sefa.giurisprudenza@unimi.it
- name.surname@studenti.unimi.it
- bd.help@unimi.it
- francesco.auxilia@unimi.it

- rocco.rinaldo@unimi.it
- esamiceli@unimi.it
- formazionelinguistica.slam@unimi.it
- nicola.fusco@unimi.it
- genny.degani@unimi.it
- registri-docenti@unimi.it
- roberto.oleari@unimi.it
- davide.proserpio@unimi.it
- daniela.galimberti@unimi.it
- international.agreements@unimi.it
- jane.doe@unimi.it
- federica.turati@unimi.it
- daniela.martini@unimi.it
- sara.torretta@unimi.it

7 Resolved Hosts

Below is a list of resolved hosts with their corresponding IP addresses:

- **10-116-statico.agra.unimi.it** : 159.149.116.10
- **10-117-statico.agra.unimi.it** : 159.149.117.10
- **10-118-statico.agra.unimi.it** : 159.149.118.10
- **10-119-statico.agra.unimi.it** : 159.149.119.10
- **100-116-dhcp.agra.unimi.it** : 159.149.116.100
- **100-117-dhcp.agra.unimi.it** : 159.149.117.100
- **100-118-dhcp.agra.unimi.it** : 159.149.118.100
- **100-119-dhcp.agra.unimi.it** : 159.149.119.100
- **101-116-dhcp.agra.unimi.it** : 159.149.116.101
- **101-117-dhcp.agra.unimi.it** : 159.149.117.101
- **101-118-dhcp.agra.unimi.it** : 159.149.118.101
- **101-119-dhcp.agra.unimi.it** : 159.149.119.101
- **102-116-dhcp.agra.unimi.it** : 159.149.116.102
- **102-117-dhcp.agra.unimi.it** : 159.149.117.102
- **102-118-dhcp.agra.unimi.it** : 159.149.118.102
- **102-119-dhcp.agra.unimi.it** : 159.149.119.102
- **103-116-dhcp.agra.unimi.it** : 159.149.116.103
- **103-117-dhcp.agra.unimi.it** : 159.149.117.103
- **103-118-dhcp.agra.unimi.it** : 159.149.118.103
- **103-119-dhcp.agra.unimi.it** : 159.149.119.103
- **104-116-dhcp.agra.unimi.it** : 159.149.116.104
- **104-117-dhcp.agra.unimi.it** : 159.149.117.104
- **104-118-dhcp.agra.unimi.it** : 159.149.118.104
- **104-119-dhcp.agra.unimi.it** : 159.149.119.104
- **105-116-dhcp.agra.unimi.it** : 159.149.116.105
- **105-117-dhcp.agra.unimi.it** : 159.149.117.105
- **105-118-dhcp.agra.unimi.it** : 159.149.118.105
- **105-119-dhcp.agra.unimi.it** : 159.149.119.105
- **106-116-dhcp.agra.unimi.it** : 159.149.116.106
- **106-117-dhcp.agra.unimi.it** : 159.149.117.106
- **106-118-dhcp.agra.unimi.it** : 159.149.118.106
- **106-119-dhcp.agra.unimi.it** : 159.149.119.106
- **107-116-dhcp.agra.unimi.it** : 159.149.116.107

- **107-117-dhcp.agra.unimi.it** : 159.149.117.107
- **107-118-dhcp.agra.unimi.it** : 159.149.118.107
- **107-119-dhcp.agra.unimi.it** : 159.149.119.107
- **108-116-dhcp.agra.unimi.it** : 159.149.116.108
- **108-117-dhcp.agra.unimi.it** : 159.149.117.108
- **108-118-dhcp.agra.unimi.it** : 159.149.118.108
- **108-119-dhcp.agra.unimi.it** : 159.149.119.108
- **109-116-dhcp.agra.unimi.it** : 159.149.116.109
- **109-117-dhcp.agra.unimi.it** : 159.149.117.109
- **109-118-dhcp.agra.unimi.it** : 159.149.118.109
- **109-119-dhcp.agra.unimi.it** : 159.149.119.109
- **11-116-statico.agra.unimi.it** : 159.149.116.11
- **11-117-statico.agra.unimi.it** : 159.149.117.11
- **11-118-statico.agra.unimi.it** : 159.149.118.11
- **11-119-statico.agra.unimi.it** : 159.149.119.11
- **110-116-dhcp.agra.unimi.it** : 159.149.116.110
- **110-117-dhcp.agra.unimi.it** : 159.149.117.110
- **110-118-dhcp.agra.unimi.it** : 159.149.118.110
- **110-119-dhcp.agra.unimi.it** : 159.149.119.110
- **111-116-dhcp.agra.unimi.it** : 159.149.116.111
- **111-117-dhcp.agra.unimi.it** : 159.149.117.111
- **111-118-dhcp.agra.unimi.it** : 159.149.118.111
- **111-119-dhcp.agra.unimi.it** : 159.149.119.111
- **112-116-dhcp.agra.unimi.it** : 159.149.116.112
- **112-117-dhcp.agra.unimi.it** : 159.149.117.112
- **112-118-dhcp.agra.unimi.it** : 159.149.118.112
- **112-119-dhcp.agra.unimi.it** : 159.149.119.112
- **113-116-dhcp.agra.unimi.it** : 159.149.116.113
- **113-117-dhcp.agra.unimi.it** : 159.149.117.113
- **113-118-dhcp.agra.unimi.it** : 159.149.118.113
- **113-119-dhcp.agra.unimi.it** : 159.149.119.113
- **114-116-dhcp.agra.unimi.it** : 159.149.116.114
- **114-117-dhcp.agra.unimi.it** : 159.149.117.114
- **114-118-dhcp.agra.unimi.it** : 159.149.118.114
- **114-119-dhcp.agra.unimi.it** : 159.149.119.114
- **115-116-dhcp.agra.unimi.it** : 159.149.116.115

- **115-117-dhcp.agra.unimi.it** : 159.149.117.115
- **115-118-dhcp.agra.unimi.it** : 159.149.118.115
- **115-119-dhcp.agra.unimi.it** : 159.149.119.115
- **116-116-dhcp.agra.unimi.it** : 159.149.116.116
- **116-117-dhcp.agra.unimi.it** : 159.149.117.116
- **116-118-dhcp.agra.unimi.it** : 159.149.118.116
- **116-119-dhcp.agra.unimi.it** : 159.149.119.116
- **117-116-dhcp.agra.unimi.it** : 159.149.116.117
- **117-117-dhcp.agra.unimi.it** : 159.149.117.117
- **117-118-dhcp.agra.unimi.it** : 159.149.118.117
- **117-119-dhcp.agra.unimi.it** : 159.149.119.117
- **118-116-dhcp.agra.unimi.it** : 159.149.116.118
- **118-117-dhcp.agra.unimi.it** : 159.149.117.118
- **118-118-dhcp.agra.unimi.it** : 159.149.118.118
- **118-119-dhcp.agra.unimi.it** : 159.149.119.118
- **118.di.unimi.it** : 159.149.130.182
- **119-116-dhcp.agra.unimi.it** : 159.149.116.119
- **119-117-dhcp.agra.unimi.it** : 159.149.117.119
- **119-118-dhcp.agra.unimi.it** : 159.149.118.119
- **119-119-dhcp.agra.unimi.it** : 159.149.119.119
- **12-116-statico.agra.unimi.it** : 159.149.116.12
- **12-117-statico.agra.unimi.it** : 159.149.117.12
- **12-118-statico.agra.unimi.it** : 159.149.118.12
- **12-119-statico.agra.unimi.it** : 159.149.119.12
- **120-116-dhcp.agra.unimi.it** : 159.149.116.120
- **120-117-dhcp.agra.unimi.it** : 159.149.117.120
- **120-118-dhcp.agra.unimi.it** : 159.149.118.120
- **120-119-dhcp.agra.unimi.it** : 159.149.119.120
- **121-116-dhcp.agra.unimi.it** : 159.149.116.121
- **121-117-dhcp.agra.unimi.it** : 159.149.117.121
- **121-118-dhcp.agra.unimi.it** : 159.149.118.121
- **121-119-dhcp.agra.unimi.it** : 159.149.119.121
- **122-116-dhcp.agra.unimi.it** : 159.149.116.122
- **122-117-dhcp.agra.unimi.it** : 159.149.117.122
- **122-118-dhcp.agra.unimi.it** : 159.149.118.122
- **122-119-dhcp.agra.unimi.it** : 159.149.119.122

- **123-116-dhcp.agra.unimi.it** : 159.149.116.123
- **123-117-dhcp.agra.unimi.it** : 159.149.117.123
- **123-118-dhcp.agra.unimi.it** : 159.149.118.123
- **123-119-dhcp.agra.unimi.it** : 159.149.119.123
- **124-116-dhcp.agra.unimi.it** : 159.149.116.124
- **124-117-dhcp.agra.unimi.it** : 159.149.117.124
- **124-118-dhcp.agra.unimi.it** : 159.149.118.124
- **124-119-dhcp.agra.unimi.it** : 159.149.119.124
- **125-116-dhcp.agra.unimi.it** : 159.149.116.125
- **125-117-dhcp.agra.unimi.it** : 159.149.117.125
- **125-118-dhcp.agra.unimi.it** : 159.149.118.125
- **125-119-dhcp.agra.unimi.it** : 159.149.119.125
- **126-116-dhcp.agra.unimi.it** : 159.149.116.126
- **126-117-dhcp.agra.unimi.it** : 159.149.117.126
- **126-118-dhcp.agra.unimi.it** : 159.149.118.126
- **126-119-dhcp.agra.unimi.it** : 159.149.119.126
- **127-116-dhcp.agra.unimi.it** : 159.149.116.127
- **127-117-dhcp.agra.unimi.it** : 159.149.117.127
- **127-118-dhcp.agra.unimi.it** : 159.149.118.127
- **127-119-dhcp.agra.unimi.it** : 159.149.119.127
- **128-116-dhcp.agra.unimi.it** : 159.149.116.128
- **128-117-dhcp.agra.unimi.it** : 159.149.117.128
- **128-118-dhcp.agra.unimi.it** : 159.149.118.128
- **128-119-dhcp.agra.unimi.it** : 159.149.119.128
- **129-116-dhcp.agra.unimi.it** : 159.149.116.129
- **129-117-dhcp.agra.unimi.it** : 159.149.117.129
- **129-118-dhcp.agra.unimi.it** : 159.149.118.129
- **129-119-dhcp.agra.unimi.it** : 159.149.119.129
- **13-116-statico.agra.unimi.it** : 159.149.116.13
- **13-117-statico.agra.unimi.it** : 159.149.117.13
- **13-119-statico.agra.unimi.it** : 159.149.119.13
- **130-116-dhcp.agra.unimi.it** : 159.149.116.130
- **130-117-dhcp.agra.unimi.it** : 159.149.117.130
- **130-118-dhcp.agra.unimi.it** : 159.149.118.130
- **130-119-dhcp.agra.unimi.it** : 159.149.119.130
- **131-116-dhcp.agra.unimi.it** : 159.149.116.131

- **131-117-dhcp.agra.unimi.it** : 159.149.117.131
- **131-118-dhcp.agra.unimi.it** : 159.149.118.131
- **131-119-dhcp.agra.unimi.it** : 159.149.119.131
- **132-116-dhcp.agra.unimi.it** : 159.149.116.132
- **132-117-dhcp.agra.unimi.it** : 159.149.117.132
- **132-118-dhcp.agra.unimi.it** : 159.149.118.132
- **132-119-dhcp.agra.unimi.it** : 159.149.119.132
- **133-116-dhcp.agra.unimi.it** : 159.149.116.133
- **133-117-dhcp.agra.unimi.it** : 159.149.117.133
- **133-118-dhcp.agra.unimi.it** : 159.149.118.133
- **133-119-dhcp.agra.unimi.it** : 159.149.119.133
- **134-116-dhcp.agra.unimi.it** : 159.149.116.134
- **134-117-dhcp.agra.unimi.it** : 159.149.117.134
- **134-118-dhcp.agra.unimi.it** : 159.149.118.134
- **134-119-dhcp.agra.unimi.it** : 159.149.119.134
- **135-116-dhcp.agra.unimi.it** : 159.149.116.135
- **135-117-dhcp.agra.unimi.it** : 159.149.117.135
- **135-118-dhcp.agra.unimi.it** : 159.149.118.135
- **135-119-dhcp.agra.unimi.it** : 159.149.119.135
- **136-116-dhcp.agra.unimi.it** : 159.149.116.136
- **136-117-dhcp.agra.unimi.it** : 159.149.117.136
- **136-118-dhcp.agra.unimi.it** : 159.149.118.136
- **136-119-dhcp.agra.unimi.it** : 159.149.119.136
- **137-116-dhcp.agra.unimi.it** : 159.149.116.137
- **137-117-dhcp.agra.unimi.it** : 159.149.117.137
- **137-118-dhcp.agra.unimi.it** : 159.149.118.137
- **137-119-dhcp.agra.unimi.it** : 159.149.119.137
- **138-116-dhcp.agra.unimi.it** : 159.149.116.138
- **138-117-dhcp.agra.unimi.it** : 159.149.117.138
- **138-118-dhcp.agra.unimi.it** : 159.149.118.138
- **138-119-dhcp.agra.unimi.it** : 159.149.119.138
- **139-116-dhcp.agra.unimi.it** : 159.149.116.139
- **139-117-dhcp.agra.unimi.it** : 159.149.117.139
- **139-118-dhcp.agra.unimi.it** : 159.149.118.139
- **139-119-dhcp.agra.unimi.it** : 159.149.119.139
- **14-116-statico.agra.unimi.it** : 159.149.116.14

- **14-117-statico.agra.unimi.it** : 159.149.117.14
- **14-119-statico.agra.unimi.it** : 159.149.119.14
- **140-116-dhcp.agra.unimi.it** : 159.149.116.140
- **140-117-dhcp.agra.unimi.it** : 159.149.117.140
- **140-118-dhcp.agra.unimi.it** : 159.149.118.140
- **140-119-dhcp.agra.unimi.it** : 159.149.119.140
- **141-116-dhcp.agra.unimi.it** : 159.149.116.141
- **141-117-dhcp.agra.unimi.it** : 159.149.117.141
- **141-118-dhcp.agra.unimi.it** : 159.149.118.141
- **141-119-dhcp.agra.unimi.it** : 159.149.119.141
- **142-116-dhcp.agra.unimi.it** : 159.149.116.142
- **142-117-dhcp.agra.unimi.it** : 159.149.117.142
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- **rproject.economia.unimi.it** : 159.149.53.241
- **rsu.unimi.it** : 159.149.53.132
- **rustdesk.di.unimi.it** : 159.149.130.178
- **s3.ricerca.sesar.di.unimi.it** : 159.149.147.136
- **samarati.di.unimi.it** : 159.149.130.139
- **sansone.crema.unimi.it** : 159.149.70.95
- **santini.di.unimi.it** : 18.192.231.252
- **santini.docenti.di.unimi.it** : 159.149.136.51
- **sba.unimi.it** : 159.149.53.168
- **scienzegiuridiche.unimi.it** : 159.149.53.164
- **sebinaopac.divsi.unimi.it** : 159.149.53.252
- **sebinaweb.divsi.unimi.it** : 159.149.53.252
- **seclab.dti.unimi.it** : 159.149.70.130
- **secregistry.cloud.di.unimi.it** : 159.149.142.185
- **securemail.unimi.it** : 159.149.10.101
- **security.di.unimi.it** : 159.149.145.130
- **sender7.unimi.it** : 159.149.10.87
- **sender8.unimi.it** : 159.149.10.88
- **servicecatalogue.unimi.it** : 159.149.53.90
- **servicedesk.unimi.it** : 159.149.53.130
- **servicedesktlc.unimi.it** : 159.149.106.226
- **servicemanagement.unimi.it** : 159.149.53.130
- **servizi.di.unimi.it** : 159.149.130.182
- **sesar.di.unimi.it** : 159.149.130.182
- **sforestiim.ariel.ctu.unimi.it** : 159.149.15.42
- **sgp2019.di.unimi.it** : 159.149.130.139
- **sid.unimi.it** : 159.149.53.132
- **siem.divtlc.unimi.it** : 159.149.104.66
- **siem.laser.di.unimi.it** : 159.149.145.130
- **simpda2014.di.unimi.it** : 159.149.130.139
- **sites.unimi.it** : 159.149.53.51
- **skynet.unimi.it** : 159.149.53.132
- **sliver.docenti.di.unimi.it** : 159.149.136.4
- **smartbear-it.di.unimi.it** : 159.149.130.182
- **smartbear.di.unimi.it** : 159.149.130.182

- **smartgreen.unimi.it** : 159.149.53.132
- **smartpen.aislab.di.unimi.it** : 159.149.133.61
- **smtp.di.unimi.it** : 159.149.130.136
- **smtp.unimi.it** : 159.149.10.90
- **smtp04.unimi.it** : 159.149.10.24
- **smtpbridge.unimi.it** : 159.149.10.20
- **socialcampus.di.unimi.it** : 159.149.130.182
- **socialmediamarketing.unimi.it** : 159.149.53.132
- **sol.divsi.unimi.it** : 159.149.53.144
- **sol.unimi.it** : 159.149.53.144
- **souris.ricerca.di.unimi.it** : 159.149.129.204
- **sp-ex-pwn-1-dhf84ba.laser.di.unimi.it** : 159.149.129.169
- **spa.cdl.unimi.it** : 130.186.7.246
- **spark.bde.ricerca.sesar.di.unimi.it** : 159.149.147.136
- **spazididattici.unimi.it** : 159.149.53.241
- **spaziofilosofico.filosofia.unimi.it** : 159.149.53.132
- **spdp.di.unimi.it** : 159.149.130.139
- **specialpcbc.unimi.it** : 159.149.53.132
- **spettacolo.fisica.unimi.it** : 193.205.78.171
- **spoc.unimi.it** : 159.149.53.196
- **spocpreprod.unimi.it** : 159.149.53.90
- **spotigem.lim.di.unimi.it** : 159.149.133.149
- **spotigemnew.lim.di.unimi.it** : 159.149.133.149
- **srv-moodle-4.ctu.unimi.it** : 159.149.15.70
- **ssfm.fisica.unimi.it** : 159.149.45.149
- **ssl.law.di.unimi.it** : 159.149.133.238
- **sslvpn.mat.unimi.it** : 159.149.95.38
- **sso.staging.unimi.it** : 159.149.53.198
- **ssrionline.unimi.it** : 159.149.15.70
- **stagingmultisites.unimi.it** : 159.149.53.246
- **star1.agra.unimi.it** : 159.149.118.13
- **ste.cdl.unimi.it** : 130.186.7.246
- **striptest.fisica.unimi.it** : 159.149.47.77
- **sts.unimi.it** : 159.149.52.198
- **studente.unimi.it** : 159.149.53.239
- **studenti.fisica.unimi.it** : 159.149.45.8

- **studenti.slam.unimi.it** : 159.149.53.241
- **studenti.unimi.it** : 159.149.53.242
- **suatp.cdl.unimi.it** : 130.186.7.246
- **sumo.divtlc.unimi.it** : 159.149.105.12
- **sunfloat.unimi.it** : 159.149.53.241
- **superset.bapherd.ricerca.sesar.di.unimi.it** : 159.149.147.136
- **support.demm.unimi.it** : 159.149.215.39
- **sux.di.unimi.it** : 159.149.136.4
- **sux4j.di.unimi.it** : 159.149.136.4
- **swarmpit.cloudstaff.di.unimi.it** : 159.149.130.182
- **sweng.di.unimi.it** : 159.149.130.139
- **tacitroots.islab.di.unimi.it** : 159.149.147.194
- **taitag.islab.di.unimi.it** : 159.149.147.194
- **tales.islab.di.unimi.it** : 159.149.147.194
- **teaching.basilico.di.unimi.it** : 159.149.130.182
- **telelavoro.unimi.it** : 159.149.104.130
- **test.cloudtest.di.unimi.it** : 159.149.130.178
- **testing.aislab.di.unimi.it** : 159.149.133.47
- **textgen.ricerca.sesar.di.unimi.it** : 159.149.147.136
- **thor.cloudtest.di.unimi.it** : 159.149.130.178
- **thor.di.unimi.it** : 159.149.130.182
- **thortest.di.unimi.it** : 159.149.130.178
- **tim.ricerca.sesar.di.unimi.it** : 159.149.147.136
- **timelapse.unimi.it** : 159.149.53.246
- **tirocini.di.unimi.it** : 159.149.130.182
- **tirociniapi.di.unimi.it** : 159.149.130.182
- **tirocinitest.di.unimi.it** : 159.149.130.178
- **tolab.fisica.unimi.it** : 159.149.45.97
- **tracesofmobility.unimi.it** : 78.47.83.247
- **traduzionegiuridica.unimi.it** : 159.149.53.241
- **traefik-mirco.laser.di.unimi.it** : 159.149.145.216
- **traefik.cloud.di.unimi.it** : 159.149.142.185
- **traefik.cloudstaff.di.unimi.it** : 159.149.130.182
- **traefik.cloudtest.di.unimi.it** : 159.149.130.178
- **traefik.laser.di.unimi.it** : 159.149.145.130
- **traefikllama.laser.di.unimi.it** : 159.149.145.148

- **trino.bapherd.ricerca.sesar.di.unimi.it** : 159.149.147.136
- **trm.cdl.unimi.it** : 130.186.7.246
- **tunnelserver.unimi.it** : 159.149.104.150
- **tutoraggio.di.unimi.it** : 159.149.129.249
- **ulisse.fisica.unimi.it** : 159.149.46.183
- **unibackup.unimi.it** : 159.149.53.49
- **unimi-aads.phmgt.unimi.it** : 159.149.106.182
- **unimia.unimi.it** : 159.149.53.172
- **unimibox.unimi.it** : 159.149.53.190
- **unimix1.unimi.it** : 159.149.10.81
- **unimix2.unimi.it** : 159.149.10.82
- **unimix3.unimi.it** : 159.149.10.83
- **unimix4.unimi.it** : 159.149.10.84
- **unipred.di.unimi.it** : 159.149.129.204
- **unipredtest.di.unimi.it** : 159.149.130.121
- **unipredweb.di.unimi.it** : 159.149.129.204
- **unistem.unimi.it** : 159.149.53.132
- **unitech.unimi.it** : 159.149.53.196
- **unsee.cloud.di.unimi.it** : 159.149.142.185
- **upload.di.unimi.it** : 159.149.130.182
- **upload.mat.unimi.it** : 159.149.30.17
- **uploadapi.di.unimi.it** : 159.149.130.182
- **users.unimi.it** : 159.149.53.51
- **vailati.unimi.it** : 159.149.53.132
- **valchiavenna.unimi.it** : 159.149.53.132
- **vaultwarden.laser.di.unimi.it** : 159.149.145.130
- **vaultwarden.ricerca.sesar.di.unimi.it** : 159.149.147.136
- **vbellandipwm.ariel.ctu.unimi.it** : 159.149.15.42
- **vc.di.unimi.it** : 159.149.130.182
- **veterinaria.cdl.unimi.it** : 130.186.7.246
- **video.unimi.it** : 159.149.15.22
- **videoconf.unimi.it** : 159.149.106.180
- **videolectures.unimi.it** : 159.149.53.186
- **videolezioni.unimi.it** : 159.149.53.238
- **vigna.di.unimi.it** : 159.149.136.4
- **visconti.di.unimi.it** : 159.149.130.139

- **viticolturaenologia.cdl.unimi.it** : 130.186.7.246
- **vocapra.lim.di.unimi.it** : 159.149.133.149
- **vpn.ctu.unimi.it** : 159.149.15.254
- **vpn.unimi.it** : 159.149.104.138
- **vpnguest.unimi.it** : 159.149.104.155
- **vpnmanutenzione.unimi.it** : 159.149.104.164
- **vpnricerca.unimi.it** : 159.149.104.180
- **vr.aislab.di.unimi.it** : 159.149.133.45
- **web.laser.di.unimi.it** : 159.149.145.130
- **webauth.divtlc.unimi.it** : 159.149.105.179
- **webdev.ewlab.di.unimi.it** : 159.149.145.2
- **webgraph.di.unimi.it** : 159.149.136.4
- **webmail.fisica.unimi.it** : 192.84.138.53
- **webmail.laser.di.unimi.it** : 159.149.145.136
- **webmail08.unimi.it** : 159.149.10.78
- **webmail11.unimi.it** : 159.149.10.71
- **websvil.divsi.unimi.it** : 159.149.53.192
- **webtools.fisica.unimi.it** : 159.149.45.150
- **whistleblowing.unimi.it** : 159.149.53.248
- **whoami.cloud.di.unimi.it** : 159.149.142.185
- **whoami.cloudstaff.di.unimi.it** : 159.149.130.182
- **whoami.cloudtest.di.unimi.it** : 159.149.130.178
- **wikirank-2017.di.unimi.it** : 159.149.136.4
- **wikirank-2020.di.unimi.it** : 159.149.136.4
- **wikirank-2023.di.unimi.it** : 159.149.136.4
- **wireguard.laser.di.unimi.it** : 159.149.145.130
- **wizardunicloud.unimi.it** : 159.149.53.241
- **wolfgang.lim.di.unimi.it** : 159.149.133.149
- **work.unimi.it** : 159.149.53.221
- **wowza.ctu.unimi.it** : 159.149.15.66
- **wp-temp.fisica.unimi.it** : 193.205.78.171
- **wp-temp2.fisica.unimi.it** : 193.205.78.171
- **wpes2021.di.unimi.it** : 159.149.130.182
- **wpmultisite-staging.unimi.it** : 159.149.53.245
- **wpmultisite.unimi.it** : 159.149.53.246
- **xavier.ricerca.di.unimi.it** : 159.149.130.120

- **xdams.lib.unimi.it** : 159.149.103.52
- **xlence.disfeb.unimi.it** : 159.149.32.133
- **xoroshiro.di.unimi.it** : 159.149.136.4
- **xorshift.di.unimi.it** : 159.149.136.4
- **xoshiro.di.unimi.it** : 159.149.136.4
- **xray.divtlc.unimi.it** : 159.149.102.162
- **zubenelgenubi.divtlc.unimi.it** : 159.149.1.9
- **zulip.di.unimi.it** : 90.147.167.18

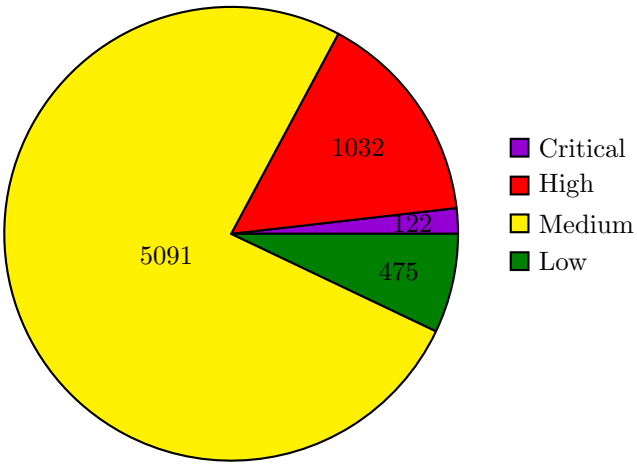
8 Server Mail found

Below is the list of Mail Server found:

- unimi-it.mail.protection.outlook.com.
- 52.101.73.4
- 52.101.68.12
- 52.101.68.32
- 52.101.68.29

9 Pie Chart of Vulnerabilities

Pie chart showing the distribution of vulnerabilities for the domain `unimi.it`:



10 Vulnerability Summary per IP

The table below shows the number of critical, high, medium, and low vulnerabilities for each IP, ordered by the number of vulnerabilities (first by critical, then high, medium, and low):

IP Address	Critical	High	Medium	Low
159.149.105.156	10	107	212	13
159.149.53.16	5	31	231	21
159.149.130.110	5	30	144	9
159.149.133.208	5	26	110	7
159.149.129.228	5	26	110	7
159.149.45.25	5	23	176	18
159.149.53.224	4	28	184	16
193.205.78.171	4	27	105	6
159.149.53.164	4	26	112	6
159.149.53.172	4	26	112	6
159.149.133.149	4	24	166	16
159.149.45.27	4	24	165	16
159.149.102.162	4	22	164	16
159.149.53.140	4	22	164	16
159.149.103.29	4	22	164	16
159.149.45.44	4	22	164	16
159.149.105.12	4	22	164	16
159.149.53.186	4	22	164	16
159.149.45.133	4	22	164	16
159.149.53.207	4	22	164	16
159.149.45.65	4	22	164	16
159.149.53.27	4	14	94	12
159.149.129.239	3	11	93	10
159.149.53.217	2	13	56	3
159.149.119.18	1	13	81	7
159.149.136.4	1	7	26	4
159.149.130.129	1	6	27	5
159.149.130.130	1	6	27	5
159.149.132.36	1	6	25	4
159.149.130.138	1	6	17	5
159.149.130.136	1	6	17	5
159.149.145.2	1	4	16	1
159.149.47.69	1	4	16	1
159.149.130.182	1	4	9	2
159.149.53.242	1	1	4	0
159.149.145.56	1	0	11	2
159.149.147.136	1	0	11	2
185.221.216.115	1	0	11	2
159.149.147.98	1	0	7	1
159.149.44.139	1	0	7	1
159.149.129.232	1	0	3	1
159.149.145.130	1	0	3	0
159.149.129.236	0	28	102	8
159.149.15.22	0	26	106	10
159.149.15.69	0	25	79	7
159.149.133.61	0	22	100	8
159.149.133.42	0	22	94	8
159.149.130.90	0	20	70	6
159.149.133.34	0	20	69	6

IP Address	Critical	High	Medium	Low
159.149.30.17	0	20	66	6
159.149.15.70	0	13	32	4
35.185.199.199	0	13	31	4
159.149.103.62	0	12	44	3
159.149.129.197	0	12	34	4
159.149.129.248	0	12	30	4
34.252.50.82	0	12	30	4
159.149.147.195	0	11	60	5
159.149.133.45	0	11	50	4
159.149.130.120	0	11	49	6
159.149.30.3	0	11	47	4
159.149.129.224	0	6	24	4
159.149.30.18	0	6	14	4
159.149.45.8	0	6	14	4
159.149.136.2	0	6	14	4
159.149.147.194	0	4	10	0
159.149.136.3	0	3	15	0
159.149.53.132	0	2	6	0
2606:4700::6812:b	0	1	7	0
18.195.28.187	0	0	4	0
50.18.215.94	0	0	4	0
159.149.47.56	0	0	4	0
159.149.133.67	0	0	4	0
51.116.169.26	0	0	4	0
159.149.53.196	0	0	2	0
159.149.53.239	0	0	2	0
159.149.47.77	0	0	2	0
159.149.53.250	0	0	2	0
159.149.129.222	0	0	1	0
159.149.53.90	0	0	1	0
159.149.47.128	0	0	0	0
159.149.15.66	0	0	0	0
159.149.10.20	0	0	0	0
3.72.140.173	0	0	0	0
159.149.106.194	0	0	0	0
159.149.145.148	0	0	0	0
52.101.68.29	0	0	0	0
159.149.147.185	0	0	0	0
159.149.10.1	0	0	0	0
159.149.96.86	0	0	0	0
35.156.224.161	0	0	0	0
159.149.53.33	0	0	0	0
159.149.47.225	0	0	0	0
159.149.116.203	0	0	0	0
104.18.36.224	0	0	0	0
159.149.129.169	0	0	0	0
159.149.10.103	0	0	0	0
159.149.105.179	0	0	0	0
159.149.53.248	0	0	0	0
159.149.10.82	0	0	0	0
159.149.10.102	0	0	0	0
159.149.116.206	0	0	0	0
159.149.53.252	0	0	0	0
52.101.68.12	0	0	0	0
159.149.104.132	0	0	0	0

IP Address	Critical	High	Medium	Low
159.149.53.247	0	0	0	0
18.192.231.252	0	0	0	0
104.18.10.29	0	0	0	0
52.101.73.4	0	0	0	0
3.126.205.183	0	0	0	0
104.18.11.29	0	0	0	0
159.149.129.101	0	0	0	0
159.149.145.162	0	0	0	0
159.149.104.130	0	0	0	0
159.149.53.241	0	0	0	0
52.59.135.101	0	0	0	0
159.149.53.34	0	0	0	0
159.149.104.138	0	0	0	0
172.64.151.32	0	0	0	0
159.149.10.81	0	0	0	0
2606:4700::6812:a	0	0	0	0
88.99.2.212	0	0	0	0
159.149.104.139	0	0	0	0
159.149.147.179	0	0	0	0
159.149.104.164	0	0	0	0
90.147.167.18	0	0	0	0
159.149.145.216	0	0	0	0
159.149.53.144	0	0	0	0
159.149.145.228	0	0	0	0
185.199.109.153	0	0	0	0

Table 1: Number of vulnerabilities per IP, sorted by severity.

11 Shodan Results for IP Addresses

Below is the detailed report of vulnerabilities and services for each IP address:

11.1 IP Address: 18.195.28.187

- Organization: A100 ROW GmbH
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 4
- Low Vulnerabilities: 0
- Total Vulnerabilities: 4

Services Running on IP Address

- Service: nginx
  - Port: 80
  - Version: N/A
  - Location: https://bebras.it/
- Service: nginx
  - Port: 443
  - Version: N/A
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2015-9251
  - CVSS Score: 4.3
  - Description: jQuery before 3.0.0 is vulnerable to Cross-site Scripting (XSS) attacks when a cross-domain Ajax request is performed without the dataType option, causing text/javascript responses to be executed.
- Vulnerability: CVE-2019-11358
  - CVSS Score: 4.3
  - Description: jQuery before 3.4.0, as used in Drupal, Backdrop CMS, and other products, mishandles jQuery.extend(true, {}, ...) because of Object.prototype pollution. If an unsanitized source object contained an enumerable __proto__ property, it could extend the native Object.prototype.
- Vulnerability: CVE-2020-11022
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.2 and before 3.5.0, passing HTML from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.
- Vulnerability: CVE-2020-11023

- CVSS Score: 4.3
- Description: In jQuery versions greater than or equal to 1.0.3 and before 3.5.0, passing HTML containing <option> elements from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.

11.2 IP Address: 159.149.15.69

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 25
- Medium Vulnerabilities: 79
- Low Vulnerabilities: 7
- Total Vulnerabilities: 111

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.41
  - Location: https://infermieristica.ctu.unimi.it/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.41
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2020-35452

  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2021-30641
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.39 to 2.4.46 Unexpected matching behavior with 'MergeSlashes OFF'

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3

  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5

  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5

  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942

  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service

- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows

- Vulnerability: CVE-2009-2299

  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2020-13950
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.41 to 2.4.46 mod_proxy_http can be made to crash (NULL pointer dereference) with specially crafted requests using both Content-Length and Transfer-Encoding headers, leading to a Denial of Service

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2023-5544
  - CVSS Score: N/A
  - Description: Wiki comments required additional sanitizing and access restrictions to prevent a stored XSS risk and potential IDOR risk.

- Vulnerability: CVE-2023-5545

  - CVSS Score: N/A
  - Description: H5P metadata automatically populated the author with the user's username, which could be sensitive information.

- Vulnerability: CVE-2023-5547
  - CVSS Score: N/A
  - Description: The course upload preview contained an XSS risk for users uploading unsafe data.
- Vulnerability: CVE-2023-5540
  - CVSS Score: N/A
  - Description: A remote code execution risk was identified in the IMSCP activity. By default this was only available to teachers and managers.
- Vulnerability: CVE-2023-5541
  - CVSS Score: N/A
  - Description: The CSV grade import method contained an XSS risk for users importing the spreadsheet, if it contained unsafe content.
- Vulnerability: CVE-2023-5548
  - CVSS Score: N/A
  - Description: Stronger revision number limitations were required on file serving endpoints to improve cache poisoning protection.
- Vulnerability: CVE-2023-5549
  - CVSS Score: N/A
  - Description: Insufficient web service capability checks made it possible to move categories a user had permission to manage, to a parent category they did not have the capability to manage.
- Vulnerability: CVE-2023-23921
  - CVSS Score: N/A
  - Description: The vulnerability was found Moodle which exists due to insufficient sanitization of user-supplied data in some returnurl parameters. A remote attacker can trick the victim to follow a specially crafted link and execute arbitrary HTML and script code in user's browser in context of vulnerable website. This flaw allows a remote attacker to perform cross-site scripting (XSS) attacks.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2022-40313

  - CVSS Score: N/A
  - Description: Recursive rendering of Mustache template helpers containing user input could, in some cases, result in an XSS risk or a page failing to load.
- Vulnerability: CVE-2024-38276
  - CVSS Score: N/A
  - Description: Incorrect CSRF token checks resulted in multiple CSRF risks.
- Vulnerability: CVE-2021-40693
  - CVSS Score: N/A
  - Description: An authentication bypass risk was identified in the external database authentication functionality, due to a type juggling vulnerability.
- Vulnerability: CVE-2022-40316
  - CVSS Score: N/A
  - Description: The H5P activity attempts report did not filter by groups, which in separate groups mode could reveal information to non-editing teachers about attempts/users in groups they should not have access to.
- Vulnerability: CVE-2021-40695
  - CVSS Score: N/A
  - Description: It was possible for a student to view their quiz grade before it had been released, using a quiz web service.
- Vulnerability: CVE-2022-40314
  - CVSS Score: N/A
  - Description: A remote code execution risk when restoring backup files originating from Moodle 1.9 was identified.
- Vulnerability: CVE-2021-36568
  - CVSS Score: N/A
  - Description: In certain Moodle products after creating a course, it is possible to add in a arbitrary "Topic" a resource, in this case a "Database" with the type "Text" where its values "Field name" and "Field description" are vulnerable to Cross Site Scripting Stored(XSS). This affects Moodle 3.11 and Moodle 3.10.4 and Moodle 3.9.7.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2023-5539
  - CVSS Score: N/A
  - Description: A remote code execution risk was identified in the Lesson activity. By default this was only available to teachers and managers.
- Vulnerability: CVE-2023-23923
  - CVSS Score: N/A
  - Description: The vulnerability was found Moodle which exists due to insufficient limitations on the "start page" preference. A remote attacker can set that preference for another user. The vulnerability allows a remote attacker to gain unauthorized access to otherwise restricted functionality.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2022-0984
  - CVSS Score: 4

  - Description: Users with the capability to configure badge criteria (teachers and managers by default) were able to configure course badges with profile field criteria, which should only be available for site badges.

- Vulnerability: CVE-2022-0985
  - CVSS Score: 4
  - Description: Insufficient capability checks could allow users with the moodle/site:uploadusers capability to delete users, without having the necessary moodle/user:delete capability.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2022-0983
  - CVSS Score: 6.5
  - Description: An SQL injection risk was identified in Badges code relating to configuring criteria. Access to the relevant capability was limited to teachers and managers by default.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5

  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows

- Vulnerability: CVE-2022-30600
  - CVSS Score: 7.5
  - Description: A flaw was found in moodle where logic used to count failed login attempts could result in the account lockout threshold being bypassed.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2021-43560
  - CVSS Score: 5
  - Description: A flaw was found in Moodle in versions 3.11 to 3.11.3, 3.10 to 3.10.7, 3.9 to 3.9.10 and earlier unsupported versions. Insufficient capability checks made it possible to fetch other users' calendar action events.

- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.

- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2021-36400
  - CVSS Score: N/A
  - Description: In Moodle, insufficient capability checks made it possible to remove other users' calendar URL subscriptions.

- Vulnerability: CVE-2023-28332
  - CVSS Score: N/A
  - Description: If the algebra filter was enabled but not functional (eg the necessary binaries were missing from the server), it presented an XSS risk.

- Vulnerability: CVE-2022-0333
  - CVSS Score: 5.5
  - Description: A flaw was found in Moodle in versions 3.11 to 3.11.4, 3.10 to 3.10.8, 3.9 to 3.9.11 and earlier unsupported versions. The calendar:manageentries capability allowed managers to access or modify any calendar event, but should have been restricted from accessing user level events.

- Vulnerability: CVE-2022-0332
  - CVSS Score: 7.5
  - Description: A flaw was found in Moodle in versions 3.11 to 3.11.4. An SQL injection risk was identified in the h5p activity web service responsible for fetching user attempt data.

- Vulnerability: CVE-2021-36402
  - CVSS Score: N/A
  - Description: In Moodle, Users' names required additional sanitizing in the account confirmation email, to prevent a self-registration phishing risk.

- Vulnerability: CVE-2022-0335
  - CVSS Score: 6.8
  - Description: A flaw was found in Moodle in versions 3.11 to 3.11.4, 3.10 to 3.10.8, 3.9 to 3.9.11 and earlier unsupported versions. The "delete badge alignment" functionality did not include the necessary token check to prevent a CSRF risk.

- Vulnerability: CVE-2023-1402
  - CVSS Score: N/A
  - Description: The course participation report required additional checks to prevent roles being displayed which the user did not have access to view.

- Vulnerability: CVE-2021-36403
  - CVSS Score: N/A
  - Description: In Moodle, in some circumstances, email notifications of messages could have the link back to the original message hidden by HTML, which may pose a phishing risk.

- Vulnerability: CVE-2013-4365

  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2021-40694
  - CVSS Score: N/A
  - Description: Insufficient escaping of the LaTeX preamble made it possible for site administrators to read files available to the HTTP server system account.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2021-36395
  - CVSS Score: N/A
  - Description: In Moodle, the file repository's URL parsing required additional recursion handling to mitigate the risk of recursion denial of service.
- Vulnerability: CVE-2022-40315
  - CVSS Score: N/A
  - Description: A limited SQL injection risk was identified in the "browse list of users" site administration page.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2007-6538
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in ing/blocks/mrbs/code/web/view_entry.php in the MRBS plugin for Moodle allows remote attackers to execute arbitrary SQL commands via the id parameter.
- Vulnerability: CVE-2023-28329
  - CVSS Score: N/A
  - Description: Insufficient validation of profile field availability condition resulted in an SQL injection risk (by default only available to teachers and managers).
- Vulnerability: CVE-2022-40208
  - CVSS Score: N/A
  - Description: In Moodle, insufficient limitations in some quiz web services made it possible for students to bypass sequential navigation during a quiz attempt.
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2020-13950
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.41 to 2.4.46 mod_proxy_http can be made to crash (NULL pointer dereference) with specially crafted requests using both Content-Length and Transfer-Encoding headers, leading to a Denial of Service
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2022-2986

  - CVSS Score: N/A
  - Description: Enabling and disabling installed H5P libraries did not include the necessary token to prevent a CSRF risk.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2023-28333
  - CVSS Score: N/A
  - Description: The Mustache pix helper contained a potential Mustache injection risk if combined with user input (note: This did not appear to be implemented/exploitable anywhere in the core Moodle LMS).

- Vulnerability: CVE-2021-36401
  - CVSS Score: N/A
  - Description: In Moodle, ID numbers exported in HTML data formats required additional sanitizing to prevent a local stored XSS risk.

- Vulnerability: CVE-2023-28331
  - CVSS Score: N/A
  - Description: Content output by the database auto-linking filter required additional sanitizing to prevent an XSS risk.

- Vulnerability: CVE-2023-28330
  - CVSS Score: N/A
  - Description: Insufficient sanitizing in backup resulted in an arbitrary file read risk. The capability to access this feature is only available to teachers, managers and admins by default.

- Vulnerability: CVE-2023-28336
  - CVSS Score: N/A
  - Description: Insufficient filtering of grade report history made it possible for teachers to access the names of users they could not otherwise access.

- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-40691
  - CVSS Score: N/A
  - Description: A session hijack risk was identified in the Shibboleth authentication plugin.

- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4

  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2023-35133
  - CVSS Score: N/A
  - Description: An issue in the logic used to check 0.0.0.0 against the cURL blocked hosts lists resulted in an SSRF risk. This flaw affects Moodle versions 4.2, 4.1 to 4.1.3, 4.0 to 4.0.8, 3.11 to 3.11.14, 3.9 to 3.9.21 and earlier unsupported versions.
- Vulnerability: CVE-2023-35132
  - CVSS Score: N/A
  - Description: A limited SQL injection risk was identified on the Mnet SSO access control page. This flaw affects Moodle versions 4.2, 4.1 to 4.1.3, 4.0 to 4.0.8, 3.11 to 3.11.14, 3.9 to 3.9.21 and earlier unsupported versions.
- Vulnerability: CVE-2023-35131
  - CVSS Score: N/A
  - Description: Content on the groups page required additional sanitizing to prevent an XSS risk. This flaw affects Moodle versions 4.2, 4.1 to 4.1.3, 4.0 to 4.0.8 and 3.11 to 3.11.14.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2021-40692
  - CVSS Score: N/A
  - Description: Insufficient capability checks made it possible for teachers to download users outside of their courses.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5

  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2022-45149
  - CVSS Score: N/A
  - Description: A vulnerability was found in Moodle which exists due to insufficient validation of the HTTP request origin in course redirect URL. A user's CSRF token was unnecessarily included in the URL when being redirected to a course they have just restored. A remote attacker can trick the victim to visit a specially crafted web page and perform arbitrary actions on behalf of the victim on the vulnerable website. This flaw allows an attacker to perform cross-site request forgery attacks.

- Vulnerability: CVE-2021-3943
  - CVSS Score: 7.5
  - Description: A flaw was found in Moodle in versions 3.11 to 3.11.3, 3.10 to 3.10.7, 3.9 to 3.9.10 and earlier unsupported versions. A remote code execution risk when restoring backup files was identified.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE

- Vulnerability: CVE-2010-4208
  - CVSS Score: 4.3

  - Description: Cross-site scripting (XSS) vulnerability in the Flash component infrastructure in YUI 2.5.0 through 2.8.1, as used in Bugzilla, Moodle, and other products, allows remote attackers to inject arbitrary web script or HTML via vectors related to uploader/assets/uploader.swf.

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2010-4207
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the Flash component infrastructure in YUI 2.4.0 through 2.8.1, as used in Bugzilla, Moodle, and other products, allows remote attackers to inject arbitrary web script or HTML via vectors related to charts/assets/charts.swf.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2022-35649
  - CVSS Score: N/A
  - Description: The vulnerability was found in Moodle, occurs due to improper input validation when parsing PostScript code. An omitted execution parameter results in a remote code execution risk for sites running GhostScript versions older than 9.50. Successful exploitation of this vulnerability may result in complete compromise of vulnerable system.

- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.

- Vulnerability: CVE-2022-45151
  - CVSS Score: N/A

  - Description: The stored-XSS vulnerability was discovered in Moodle which exists due to insufficient sanitization of user-supplied data in several "social" user profile fields. An attacker could inject and execute arbitrary HTML and script code in user's browser in context of vulnerable website.

- Vulnerability: CVE-2021-36397
  - CVSS Score: N/A
  - Description: In Moodle, insufficient capability checks meant message deletions were not limited to the current user.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2021-36392
  - CVSS Score: N/A
  - Description: In Moodle, an SQL injection risk was identified in the library fetching a user's enrolled courses.

- Vulnerability: CVE-2021-36393
  - CVSS Score: N/A
  - Description: In Moodle, an SQL injection risk was identified in the library fetching a user's recent courses.

- Vulnerability: CVE-2021-36394
  - CVSS Score: N/A
  - Description: In Moodle, a remote code execution risk was identified in the Shibboleth authentication plugin.

- Vulnerability: CVE-2022-45152
  - CVSS Score: N/A
  - Description: A blind Server-Side Request Forgery (SSRF) vulnerability was found in Moodle. This flaw exists due to insufficient validation of user-supplied input in LTI provider library. The library does not utilise Moodle's inbuilt cURL helper, which resulted in a blind SSRF risk. An attacker can send a specially crafted HTTP request and trick the application to initiate requests to arbitrary systems. This vulnerability allows a remote attacker to perform SSRF attacks.

- Vulnerability: CVE-2021-36396
  - CVSS Score: N/A
  - Description: In Moodle, insufficient redirect handling made it possible to blindly bypass cURL blocked hosts/allowed ports restrictions, resulting in a blind SSRF risk.

- Vulnerability: CVE-2022-45150
  - CVSS Score: N/A

  - Description: A reflected cross-site scripting vulnerability was discovered in Moodle. This flaw exists due to insufficient sanitization of user-supplied data in policy tool. An attacker can trick the victim to open a specially crafted link that executes an arbitrary HTML and script code in user's browser in context of vulnerable website. This vulnerability may allow an attacker to perform cross-site scripting (XSS) attacks to gain access potentially sensitive information and modification of web pages.

- Vulnerability: CVE-2021-36398
  - CVSS Score: N/A
  - Description: In moodle, ID numbers displayed in the web service token list required additional sanitizing to prevent a stored XSS risk.

- Vulnerability: CVE-2021-36399
  - CVSS Score: N/A
  - Description: In Moodle, ID numbers displayed in the quiz override screens required additional sanitizing to prevent a stored XSS risk.

- Vulnerability: CVE-2021-30641
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.39 to 2.4.46 Unexpected matching behavior with 'MergeSlashes OFF'

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2023-30944
  - CVSS Score: N/A
  - Description: The vulnerability was found Moodle which exists due to insufficient sanitization of user-supplied data in external Wiki method for listing pages. A remote attacker can send a specially crafted request to the affected application and execute limited SQL commands within the application database.

- Vulnerability: CVE-2022-35653
  - CVSS Score: N/A
  - Description: A reflected XSS issue was identified in the LTI module of Moodle. The vulnerability exists due to insufficient sanitization of user-supplied data in the LTI module. A remote attacker can trick the victim to follow a specially crafted link and execute arbitrary HTML and script code in user's browser in context of vulnerable website to steal potentially sensitive information, change appearance of the web page, can perform phishing and drive-by-download attacks. This vulnerability does not impact authenticated users.

- Vulnerability: CVE-2022-35652
  - CVSS Score: N/A
  - Description: An open redirect issue was found in Moodle due to improper sanitization of user-supplied data in mobile auto-login feature. A remote attacker can create a link that leads to a trusted website, however, when clicked, it redirects the victims to arbitrary URL/domain. Successful exploitation of this vulnerability may allow a remote attacker to perform a phishing attack and steal potentially sensitive information.
- Vulnerability: CVE-2022-35651
  - CVSS Score: N/A
  - Description: A stored XSS and blind SSRF vulnerability was found in Moodle, occurs due to insufficient sanitization of user-supplied data in the SCORM track details. A remote attacker can trick the victim to follow a specially crafted link and execute arbitrary HTML and script code in user's browser in context of vulnerable website to steal potentially sensitive information, change appearance of the web page, can perform phishing and drive-by-download attacks.
- Vulnerability: CVE-2022-35650
  - CVSS Score: N/A
  - Description: The vulnerability was found in Moodle, occurs due to input validation error when importing lesson questions. This insufficient path checks results in arbitrary file read risk. This vulnerability allows a remote attacker to perform directory traversal attacks. The capability to access this feature is only available to teachers, managers and admins by default.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-0334
  - CVSS Score: 4
  - Description: A flaw was found in Moodle in versions 3.11 to 3.11.4, 3.10 to 3.10.8, 3.9 to 3.9.11 and earlier unsupported versions. Insufficient capability checks could lead to users accessing their grade report for courses where they did not have the required gradereport/user:view capability.
- Vulnerability: CVE-2021-43558
  - CVSS Score: 4.3

  - Description: A flaw was found in Moodle in versions 3.11 to 3.11.3, 3.10 to 3.10.7, 3.9 to 3.9.10 and earlier unsupported versions. A URL parameter in the filetype site administrator tool required extra sanitizing to prevent a reflected XSS risk.

- Vulnerability: CVE-2021-43559
  - CVSS Score: 6.8
  - Description: A flaw was found in Moodle in versions 3.11 to 3.11.3, 3.10 to 3.10.7, 3.9 to 3.9.10 and earlier unsupported versions. The "delete related badge" functionality did not include the necessary token check to prevent a CSRF risk.

- Vulnerability: CVE-2023-5551
  - CVSS Score: N/A
  - Description: Separate Groups mode restrictions were not honoured in the forum summary report, which would display users from other groups.

- Vulnerability: CVE-2023-5550
  - CVSS Score: N/A
  - Description: In a shared hosting environment that has been misconfigured to allow access to other users' content, a Moodle user who also has direct access to the web server outside of the Moodle webroot could utilise a local file include to achieve remote code execution.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2022-30599
  - CVSS Score: 7.5
  - Description: A flaw was found in moodle where an SQL injection risk was identified in Badges code relating to configuring criteria.

- Vulnerability: CVE-2022-30598
  - CVSS Score: 4

  - Description: A flaw was found in moodle where global search results could include author information on some activities where a user may not otherwise have access to it.

- Vulnerability: CVE-2022-30597
  - CVSS Score: 5
  - Description: A flaw was found in moodle where the description user field was not hidden when being set as a hidden user field.

- Vulnerability: CVE-2022-30596
  - CVSS Score: 3.5
  - Description: A flaw was found in moodle where ID numbers displayed when bulk allocating markers to assignments required additional sanitizing to prevent a stored XSS risk.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.3 IP Address: 159.149.47.128

- Organization: UNI-Milano
- Operating System: Ubuntu
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 7.6p1 Ubuntu 4ubuntu0.7
  - Location:
- Service: nginx
  - Port: 80
  - Version: N/A
  - Location: https://159.149.47.128/
- Service: nginx
  - Port: 443
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.4 IP Address: 159.149.15.66

- Organization: UNI-Milano
- Operating System: Windows
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: Microsoft IIS httpd
  - Port: 80
  - Version: 10.0
  - Location: /
- Service: Microsoft IIS httpd
  - Port: 443
  - Version: 10.0
  - Location: /

No vulnerabilities found for this IP address.

11.5 IP Address: 159.149.10.20

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 25
  - Version: N/A
  - Location:
- Service: N/A
  - Port: 110
  - Version: N/A
  - Location:
- Service: N/A
  - Port: 143
  - Version: N/A
  - Location:
- Service: N/A
  - Port: 993
  - Version: N/A
  - Location:
- Service: N/A
  - Port: 995
  - Version: N/A
  - Location:

No vulnerabilities found for this IP address.

11.6 IP Address: 159.149.130.120

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 11
- Medium Vulnerabilities: 49
- Low Vulnerabilities: 6
- Total Vulnerabilities: 66

Services Running on IP Address

- Service: N/A
  - Port: 21
  - Version: N/A
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.2.19
  - Location: /
- Service: PostgreSQL
  - Port: 5432
  - Version: 9.1.2 - 9.1.3
  - Location:
- Service: Apache Tomcat
  - Port: 8080
  - Version: N/A
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2012-0021
  - CVSS Score: 2.6
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server 2.2.17 through 2.2.21, when a threaded MPM is used, does not properly handle a %{}C format string, which allows remote attackers to cause a denial of service (daemon crash) via a cookie that lacks both a name and a value.
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2011-4317

  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 1.3.x through 1.3.42, 2.0.x through 2.0.64, and 2.2.x through 2.2.21, when the Revision 1179239 patch is in place, does not properly interact with use of (1) RewriteRule and (2) ProxyPassMatch pattern matches for configuration of a reverse proxy, which allows remote attackers to send requests to intranet servers via a malformed URI containing an @ (at sign) character and a : (colon) character in invalid positions. NOTE: this vulnerability exists because of an incomplete fix for CVE-2011-3368.

- Vulnerability: CVE-2011-3607
  - CVSS Score: 4.4
  - Description: Integer overflow in the ap_pregsub function in server/util.c in the Apache HTTP Server 2.0.x through 2.0.64 and 2.2.x through 2.2.21, when the mod_setenvif module is enabled, allows local users to gain privileges via a .htaccess file with a crafted SetEnvIf directive, in conjunction with a crafted HTTP request header, leading to a heap-based buffer overflow.

- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2012-4557
  - CVSS Score: 5
  - Description: The mod_proxy_ajp module in the Apache HTTP Server 2.2.12 through 2.2.21 places a worker node into an error state upon detection of a long request-processing time, which allows remote attackers to cause a denial of service (worker consumption) via an expensive request.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5

  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2012-0883
  - CVSS Score: 6.9
  - Description: envvars (aka envvars-std) in the Apache HTTP Server before 2.4.2 places a zero-length directory name in the LD_LIBRARY_PATH, which allows local users to gain privileges via a Trojan horse DSO in the current working directory during execution of apachectl.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2017-3169
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_ssl may dereference a NULL pointer when third-party modules call ap_hook_process_connection() during an HTTP request to an HTTPS port.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2012-3499
  - CVSS Score: 4.3
  - Description: Multiple cross-site scripting (XSS) vulnerabilities in the Apache HTTP Server 2.2.x before 2.2.24-dev and 2.4.x before 2.4.4 allow remote attackers to inject arbitrary web script or HTML via vectors involving hostnames and URIs in the (1) mod_imagemap, (2) mod_info, (3) mod_ldap, (4) mod_proxy_ftp, and (5) mod_status modules.
- Vulnerability: CVE-2012-4558
  - CVSS Score: 4.3
  - Description: Multiple cross-site scripting (XSS) vulnerabilities in the balancer_handler function in the manager interface in mod_proxy_balancer.c in the mod_proxy_balancer module in the Apache HTTP Server 2.2.x before 2.2.24-dev and 2.4.x before 2.4.4 allow remote attackers to inject arbitrary web script or HTML via a crafted string.
- Vulnerability: CVE-2021-32791

  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2013-1896
  - CVSS Score: 4.3
  - Description: mod_dav.c in the Apache HTTP Server before 2.2.25 does not properly determine whether DAV is enabled for a URI, which allows remote attackers to cause a denial of service (segmentation fault) via a MERGE request in which the URI is configured for handling by the mod_dav_svn module, but a certain href attribute in XML data refers to a non-DAV URI.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8
  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A

  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2022-31813

  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2011-3368
  - CVSS Score: 5
  - Description: The mod_proxy module in the Apache HTTP Server 1.3.x through 1.3.42, 2.0.x through 2.0.64, and 2.2.x through 2.2.21 does not properly interact with use of (1) RewriteRule and (2) ProxyPassMatch pattern matches for configuration of a reverse proxy, which allows remote attackers to send requests to intranet servers via a malformed URI containing an initial @ (at sign) character.

- Vulnerability: CVE-2012-2687
  - CVSS Score: 2.6
  - Description: Multiple cross-site scripting (XSS) vulnerabilities in the make_variant_list function in mod_negotiation.c in the mod_negotiation module in the Apache HTTP Server 2.4.x before 2.4.3, when the MultiViews option is enabled, allow remote attackers to inject arbitrary web script or HTML via a crafted filename that is not properly handled during construction of a variant list.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2016-5387
  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2021-40438

  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-4415
  - CVSS Score: 1.2
  - Description: The ap_pregsub function in server/util.c in the Apache HTTP Server 2.0.x through 2.0.64 and 2.2.x through 2.2.21, when the mod_setenvif module is enabled, does not restrict the size of values of environment variables, which allows local users to cause a denial of service (memory consumption or NULL pointer dereference) via a .htaccess file with a crafted SetEnvIf directive, in conjunction with a crafted HTTP request header, related to (1) the "len +=" statement and (2) the apr_pcalloc function call, a different vulnerability than CVE-2011-3607.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.
- Vulnerability: CVE-2012-0031
  - CVSS Score: 4.6
  - Description: scoreboard.c in the Apache HTTP Server 2.2.21 and earlier might allow local users to cause a denial of service (daemon crash during shutdown) or possibly have unspecified other impact by modifying a certain type field within a scoreboard shared memory segment, leading to an invalid call to the free function.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2008-0455
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_negotiation module in the Apache HTTP Server 2.2.6 and earlier in the 2.2.x series, 2.0.61 and earlier in the 2.0.x series, and 1.3.39 and earlier in the 1.3.x series allows remote authenticated users to inject arbitrary web script or HTML by uploading a file with a name containing XSS sequences and a file extension, which leads to injection within a (1) "406 Not Acceptable" or (2) "300 Multiple Choices" HTTP response when the extension is omitted in a request for the file.
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4

  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2011-3348
  - CVSS Score: 4.3
  - Description: The mod_proxy_ajp module in the Apache HTTP Server before 2.2.21, when used with mod_proxy_balancer in certain configurations, allows remote attackers to cause a denial of service (temporary "error state" in the backend server) via a malformed HTTP request.

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.

- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.

- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2012-0053
  - CVSS Score: 4.3
  - Description: protocol.c in the Apache HTTP Server 2.2.x through 2.2.21 does not properly restrict header information during construction of Bad Request (aka 400) error documents, which allows remote attackers to obtain the values of HTTPOnly cookies via vectors involving a (1) long or (2) malformed header in conjunction with crafted web script.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2013-1862

  - CVSS Score: 5.1
  - Description: mod_rewrite.c in the mod_rewrite module in the Apache HTTP Server 2.2.x before 2.2.25 writes data to a log file without sanitizing non-printable characters, which might allow remote attackers to execute arbitrary commands via an HTTP request containing an escape sequence for a terminal emulator.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-28615

  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2011-3192
  - CVSS Score: 7.8
  - Description: The byterange filter in the Apache HTTP Server 1.3.x, 2.0.x through 2.0.64, and 2.2.x through 2.2.19 allows remote attackers to cause a denial of service (memory and CPU consumption) via a Range header that expresses multiple overlapping ranges, as exploited in the wild in August 2011, a different vulnerability than CVE-2007-0086.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

11.7 IP Address: 159.149.102.162

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 22
- Medium Vulnerabilities: 164
- Low Vulnerabilities: 16
- Total Vulnerabilities: 206

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.6
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.6
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3

  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using 'OIDCPreservePost On'.
- Vulnerability: CVE-2024-38476

  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5

  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167

  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.8 IP Address: 3.72.140.173

- Organization: A100 ROW GmbH
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 80
  - Version: N/A
  - Location: https://wvgolfcars.com/

No vulnerabilities found for this IP address.

11.9 IP Address: 159.149.53.164

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 26
- Medium Vulnerabilities: 112
- Low Vulnerabilities: 6
- Total Vulnerabilities: 148

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.37
  - Location: https://fisica.unimi.it/

Vulnerabilities Found

- Vulnerability: CVE-2019-0215
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 releases 2.4.37 and 2.4.38, a bug in mod_ssl when using per-location client certificate verification with TLSv1.3 allowed a client to bypass configured access control restrictions.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2022-2068
  - CVSS Score: 10

  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).

- Vulnerability: CVE-2021-3449
  - CVSS Score: 4.3
  - Description: An OpenSSL TLS server may crash if sent a maliciously crafted renegotiation ClientHello message from a client. If a TLSv1.2 renegotiation ClientHello omits the signature_algorithms extension (where it was present in the initial ClientHello), but includes a signature_algorithms_cert extension then a NULL pointer dereference will result, leading to a crash and a denial of service attack. A server is only vulnerable if it has TLSv1.2 and renegotiation enabled (which is the default configuration). OpenSSL TLS clients are not impacted by this issue. All OpenSSL 1.1.1 versions are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1k. OpenSSL 1.0.2 is not impacted by this issue. Fixed in OpenSSL 1.1.1k (Affected 1.1.1-1.1.1j).
- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A

  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A

- Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are consideredrnot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2019-0197
  - CVSS Score: 4.9
  - Description: A vulnerability was found in Apache HTTP Server 2.4.34 to 2.4.38. When HTTP/2 was enabled for a http: host or H2Upgrade was enabled for h2 on a https: host, an Upgrade request from http/1.1 to http/2 that was not the first request on a connection could lead to a misconfiguration and crash. Server that never enabled the h2 protocol or that only enabled it for https: and did not set "H2Upgrade on" are unaffected by this issue.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220

  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-3711
  - CVSS Score: 7.5
  - Description: In order to decrypt SM2 encrypted data an application is expected to call the API function EVP_PKEY_decrypt(). Typically an application will call this function twice. The first time, on entry, the "out" parameter can be NULL and, on exit, the "outlen" parameter is populated with the buffer size required to hold the decrypted plaintext. The application can then allocate a sufficiently sized buffer and call EVP_PKEY_decrypt() again, but this time passing a non-NULL value for the "out" parameter. A bug in the implementation of the SM2 decryption code means that the calculation of the buffer size required to hold the plaintext returned by the first call to EVP_PKEY_decrypt() can be smaller than the actual size required by the second call. This can lead to a buffer overflow when EVP_PKEY_decrypt() is called by the application a second time with a buffer that is too small. A malicious attacker who is able present SM2 content for decryption to an application could cause attacker chosen data to overflow the buffer by up to a maximum of 62 bytes altering the contents of other data held after the buffer, possibly changing application behaviour or causing the application to crash. The location of the buffer is application dependent but is typically heap allocated. Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k).
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4

  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2019-10097
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4.32-2.4.39, when mod_remoteip was configured to use a trusted intermediary proxy server using the "PROXY" protocol, a specially crafted PROXY header could trigger a stack buffer overflow or NULL pointer deference. This vulnerability could only be triggered by a trusted proxy and not by untrusted HTTP clients.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3
  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2020-11984

  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE

- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.

- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2022-0778
  - CVSS Score: 5
  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).
- Vulnerability: CVE-2022-2097
  - CVSS Score: 5
  - Description: AES OCB mode for 32-bit x86 platforms using the AES-NI assembly optimised implementation will not encrypt the entirety of the data under some circumstances. This could reveal sixteen bytes of data that was preexisting in the memory that wasn't written. In the special case of "in place" encryption, sixteen bytes of the plaintext would be revealed. Since OpenSSL does not support OCB based cipher suites for TLS and DTLS, they are both unaffected. Fixed in OpenSSL 3.0.5 (Affected 3.0.0-3.0.4). Fixed in OpenSSL 1.1.1q (Affected 1.1.1-1.1.1p).
- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A

  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5
  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5

  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2019-0215

  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 releases 2.4.37 and 2.4.38, a bug in mod_ssl when using per-location client certificate verification with TLSv1.3 allowed a client to bypass configured access control restrictions.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2021-3449
  - CVSS Score: 4.3
  - Description: An OpenSSL TLS server may crash if sent a maliciously crafted renegotiation ClientHello message from a client. If a TLSv1.2 renegotiation ClientHello omits the signature_algorithms extension (where it was present in the initial ClientHello), but includes a signature_algorithms_cert extension then a NULL pointer dereference will result, leading to a crash and a denial of service attack. A server is only vulnerable if it has TLSv1.2 and renegotiation enabled (which is the default configuration). OpenSSL TLS clients are not impacted by this issue. All OpenSSL 1.1.1 versions are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1k. OpenSSL 1.0.2 is not impacted by this issue. Fixed in OpenSSL 1.1.1k (Affected 1.1.1-1.1.1j).
- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2020-1927

  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n2̂) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2019-0197
  - CVSS Score: 4.9
  - Description: A vulnerability was found in Apache HTTP Server 2.4.34 to 2.4.38. When HTTP/2 was enabled for a http: host or H2Upgrade was enabled for h2 on a https: host, an Upgrade request from http/1.1 to http/2 that was not the first request on a connection could lead to a misconfiguration and crash. Server that never enabled the h2 protocol or that only enabled it for https: and did not set "H2Upgrade on" are unaffected by this issue.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220

  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-3711
  - CVSS Score: 7.5
  - Description: In order to decrypt SM2 encrypted data an application is expected to call the API function EVP_PKEY_decrypt(). Typically an application will call this function twice. The first time, on entry, the "out" parameter can be NULL and, on exit, the "outlen" parameter is populated with the buffer size required to hold the decrypted plaintext. The application can then allocate a sufficiently sized buffer and call EVP_PKEY_decrypt() again, but this time passing a non-NULL value for the "out" parameter. A bug in the implementation of the SM2 decryption code means that the calculation of the buffer size required to hold the plaintext returned by the first call to EVP_PKEY_decrypt() can be smaller than the actual size required by the second call. This can lead to a buffer overflow when EVP_PKEY_decrypt() is called by the application a second time with a buffer that is too small. A malicious attacker who is able present SM2 content for decryption to an application could cause attacker chosen data to overflow the buffer by up to a maximum of 62 bytes altering the contents of other data held after the buffer, possibly changing application behaviour or causing the application to crash. The location of the buffer is application dependent but is typically heap allocated. Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k).
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4

  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2019-10097
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4.32-2.4.39, when mod_remoteip was configured to use a trusted intermediary proxy server using the "PROXY" protocol, a specially crafted PROXY header could trigger a stack buffer overflow or NULL pointer deference. This vulnerability could only be triggered by a trusted proxy and not by untrusted HTTP clients.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3
  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2020-11984

  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE

- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.

- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2022-0778
  - CVSS Score: 5
  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).
- Vulnerability: CVE-2022-2097
  - CVSS Score: 5
  - Description: AES OCB mode for 32-bit x86 platforms using the AES-NI assembly optimised implementation will not encrypt the entirety of the data under some circumstances. This could reveal sixteen bytes of data that was preexisting in the memory that wasn't written. In the special case of "in place" encryption, sixteen bytes of the plaintext would be revealed. Since OpenSSL does not support OCB based cipher suites for TLS and DTLS, they are both unaffected. Fixed in OpenSSL 3.0.5 (Affected 3.0.0-3.0.4). Fixed in OpenSSL 1.1.1q (Affected 1.1.1-1.1.1p).
- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A

  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5
  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5

  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.10 IP Address: 159.149.53.242

- Organization: UNI-Milano
- Operating System: Windows
- Critical Vulnerabilities: 1
- High Vulnerabilities: 1
- Medium Vulnerabilities: 4
- Low Vulnerabilities: 0
- Total Vulnerabilities: 6

Services Running on IP Address

- Service: Microsoft IIS httpd
  - Port: 80
  - Version: 6.0
  - Location: http://studenti.divsi.unimi.it/Default.htm

Vulnerabilities Found

- Vulnerability: CVE-2009-4444
  - CVSS Score: 6
  - Description: Microsoft Internet Information Services (IIS) 5.x and 6.x uses only the portion of a filename before a ; (semicolon) character to determine the file extension, which allows remote attackers to bypass intended extension restrictions of third-party upload applications via a filename with a (1) .asp, (2) .cer, or (3) .asa first extension, followed by a semicolon and a safe extension, as demonstrated by the use of asp.dll to handle a .asp;.jpg file.
- Vulnerability: CVE-2009-4445
  - CVSS Score: 6
  - Description: Microsoft Internet Information Services (IIS), when used in conjunction with unspecified third-party upload applications, allows remote attackers to create empty files with arbitrary extensions via a filename containing an initial extension followed by a : (colon) and a safe extension, as demonstrated by an upload of a .asp:.jpg file that results in creation of an empty .asp file, related to support for the NTFS Alternate Data Streams (ADS) filename syntax. NOTE: it could be argued that this is a vulnerability in the third-party product, not IIS, because the third-party product should be applying its extension restrictions to the portion of the filename before the colon.
- Vulnerability: CVE-2005-2089
  - CVSS Score: 4.3
  - Description: Microsoft IIS 5.0 and 6.0 allows remote attackers to poison the web cache, bypass web application firewall protection, and conduct XSS attacks via an HTTP request with both a "Transfer-Encoding: chunked" header and a Content-Length header, which causes IIS to incorrectly handle and forward the body of the request in a way that causes the receiving server to process it as a separate HTTP request, aka "HTTP Request Smuggling."

- Vulnerability: CVE-2009-1535
  - CVSS Score: 7.5
  - Description: The WebDAV extension in Microsoft Internet Information Services (IIS) 5.1 and 6.0 allows remote attackers to bypass URI-based protection mechanisms, and list folders or read, create, or modify files, via a %c0%af (Unicode / character) at an arbitrary position in the URI, as demonstrated by inserting %c0%af into a "/protected/" initial pathname component to bypass the password protection on the protected\{} folder, aka "IIS 5.1 and 6.0 WebDAV Authentication Bypass Vulnerability," a different vulnerability than CVE-2009-1122.
- Vulnerability: CVE-2009-2521
  - CVSS Score: 5
  - Description: Stack consumption vulnerability in the FTP Service in Microsoft Internet Information Services (IIS) 5.0 through 7.0 allows remote authenticated users to cause a denial of service (daemon crash) via a list (ls) -R command containing a wildcard that references a subdirectory, followed by a .. (dot dot), aka "IIS FTP Service DoS Vulnerability."
- Vulnerability: CVE-2008-1446
  - CVSS Score: 9
  - Description: Integer overflow in the Internet Printing Protocol (IPP) ISAPI extension in Microsoft Internet Information Services (IIS) 5.0 through 7.0 on Windows 2000 SP4, XP SP2 and SP3, Server 2003 SP1 and SP2, and Server 2008 allows remote authenticated users to execute arbitrary code via an HTTP POST request that triggers an outbound IPP connection from a web server to a machine operated by the attacker, aka "Integer Overflow in IPP Service Vulnerability."

11.11 IP Address: 159.149.53.172

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 26
- Medium Vulnerabilities: 112
- Low Vulnerabilities: 6
- Total Vulnerabilities: 148

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.37
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.37
  - Location: https://cas.unimi.it/login?service=https%3A%2F%2Funimia.unimi.it%2Fportal%2Fse

Vulnerabilities Found

- Vulnerability: CVE-2019-0215
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 releases 2.4.37 and 2.4.38, a bug in mod_ssl when using per-location client certificate verification with TLSv1.3 allowed a client to bypass configured access control restrictions.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068

  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).

- Vulnerability: CVE-2021-3449
  - CVSS Score: 4.3
  - Description: An OpenSSL TLS server may crash if sent a maliciously crafted renegotiation ClientHello message from a client. If a TLSv1.2 renegotiation ClientHello omits the signature_algorithms extension (where it was present in the initial ClientHello), but includes a signature_algorithms_cert extension then a NULL pointer dereference will result, leading to a crash and a denial of service attack. A server is only vulnerable if it has TLSv1.2 and renegotiation enabled (which is the default configuration). OpenSSL TLS clients are not impacted by this issue. All OpenSSL 1.1.1 versions are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1k. OpenSSL 1.0.2 is not impacted by this issue. Fixed in OpenSSL 1.1.1k (Affected 1.1.1-1.1.1j).
- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A

  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A

- Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2019-0197
  - CVSS Score: 4.9
  - Description: A vulnerability was found in Apache HTTP Server 2.4.34 to 2.4.38. When HTTP/2 was enabled for a http: host or H2Upgrade was enabled for h2 on a https: host, an Upgrade request from http/1.1 to http/2 that was not the first request on a connection could lead to a misconfiguration and crash. Server that never enabled the h2 protocol or that only enabled it for https: and did not set "H2Upgrade on" are unaffected by this issue.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220

  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-3711
  - CVSS Score: 7.5
  - Description: In order to decrypt SM2 encrypted data an application is expected to call the API function EVP_PKEY_decrypt(). Typically an application will call this function twice. The first time, on entry, the "out" parameter can be NULL and, on exit, the "outlen" parameter is populated with the buffer size required to hold the decrypted plaintext. The application can then allocate a sufficiently sized buffer and call EVP_PKEY_decrypt() again, but this time passing a non-NULL value for the "out" parameter. A bug in the implementation of the SM2 decryption code means that the calculation of the buffer size required to hold the plaintext returned by the first call to EVP_PKEY_decrypt() can be smaller than the actual size required by the second call. This can lead to a buffer overflow when EVP_PKEY_decrypt() is called by the application a second time with a buffer that is too small. A malicious attacker who is able present SM2 content for decryption to an application could cause attacker chosen data to overflow the buffer by up to a maximum of 62 bytes altering the contents of other data held after the buffer, possibly changing application behaviour or causing the application to crash. The location of the buffer is application dependent but is typically heap allocated. Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k).
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4

  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2019-10097
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4.32-2.4.39, when mod_remoteip was configured to use a trusted intermediary proxy server using the "PROXY" protocol, a specially crafted PROXY header could trigger a stack buffer overflow or NULL pointer deference. This vulnerability could only be triggered by a trusted proxy and not by untrusted HTTP clients.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3
  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2020-11984

  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE

- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.

- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2022-0778
  - CVSS Score: 5
  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).
- Vulnerability: CVE-2022-2097
  - CVSS Score: 5
  - Description: AES OCB mode for 32-bit x86 platforms using the AES-NI assembly optimised implementation will not encrypt the entirety of the data under some circumstances. This could reveal sixteen bytes of data that was preexisting in the memory that wasn't written. In the special case of "in place" encryption, sixteen bytes of the plaintext would be revealed. Since OpenSSL does not support OCB based cipher suites for TLS and DTLS, they are both unaffected. Fixed in OpenSSL 3.0.5 (Affected 3.0.0-3.0.4). Fixed in OpenSSL 1.1.1q (Affected 1.1.1-1.1.1p).
- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A

  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5
  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5

  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2019-0215

  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 releases 2.4.37 and 2.4.38, a bug in mod_ssl when using per-location client certificate verification with TLSv1.3 allowed a client to bypass configured access control restrictions.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2021-3449
  - CVSS Score: 4.3
  - Description: An OpenSSL TLS server may crash if sent a maliciously crafted renegotiation ClientHello message from a client. If a TLSv1.2 renegotiation ClientHello omits the signature_algorithms extension (where it was present in the initial ClientHello), but includes a signature_algorithms_cert extension then a NULL pointer dereference will result, leading to a crash and a denial of service attack. A server is only vulnerable if it has TLSv1.2 and renegotiation enabled (which is the default configuration). OpenSSL TLS clients are not impacted by this issue. All OpenSSL 1.1.1 versions are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1k. OpenSSL 1.0.2 is not impacted by this issue. Fixed in OpenSSL 1.1.1k (Affected 1.1.1-1.1.1j).
- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2020-1927

  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n2̂) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2019-0197
  - CVSS Score: 4.9
  - Description: A vulnerability was found in Apache HTTP Server 2.4.34 to 2.4.38. When HTTP/2 was enabled for a http: host or H2Upgrade was enabled for h2 on a https: host, an Upgrade request from http/1.1 to http/2 that was not the first request on a connection could lead to a misconfiguration and crash. Server that never enabled the h2 protocol or that only enabled it for https: and did not set "H2Upgrade on" are unaffected by this issue.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220

  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-3711
  - CVSS Score: 7.5
  - Description: In order to decrypt SM2 encrypted data an application is expected to call the API function EVP_PKEY_decrypt(). Typically an application will call this function twice. The first time, on entry, the "out" parameter can be NULL and, on exit, the "outlen" parameter is populated with the buffer size required to hold the decrypted plaintext. The application can then allocate a sufficiently sized buffer and call EVP_PKEY_decrypt() again, but this time passing a non-NULL value for the "out" parameter. A bug in the implementation of the SM2 decryption code means that the calculation of the buffer size required to hold the plaintext returned by the first call to EVP_PKEY_decrypt() can be smaller than the actual size required by the second call. This can lead to a buffer overflow when EVP_PKEY_decrypt() is called by the application a second time with a buffer that is too small. A malicious attacker who is able present SM2 content for decryption to an application could cause attacker chosen data to overflow the buffer by up to a maximum of 62 bytes altering the contents of other data held after the buffer, possibly changing application behaviour or causing the application to crash. The location of the buffer is application dependent but is typically heap allocated. Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k).
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4

  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2019-10097
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4.32-2.4.39, when mod_remoteip was configured to use a trusted intermediary proxy server using the "PROXY" protocol, a specially crafted PROXY header could trigger a stack buffer overflow or NULL pointer deference. This vulnerability could only be triggered by a trusted proxy and not by untrusted HTTP clients.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3
  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2020-11984

  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE

- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.

- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2022-0778
  - CVSS Score: 5
  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).
- Vulnerability: CVE-2022-2097
  - CVSS Score: 5
  - Description: AES OCB mode for 32-bit x86 platforms using the AES-NI assembly optimised implementation will not encrypt the entirety of the data under some circumstances. This could reveal sixteen bytes of data that was preexisting in the memory that wasn't written. In the special case of "in place" encryption, sixteen bytes of the plaintext would be revealed. Since OpenSSL does not support OCB based cipher suites for TLS and DTLS, they are both unaffected. Fixed in OpenSSL 3.0.5 (Affected 3.0.0-3.0.4). Fixed in OpenSSL 1.1.1q (Affected 1.1.1-1.1.1p).
- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A

  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5
  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5

  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.12 IP Address: 159.149.129.248

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 12
- Medium Vulnerabilities: 30
- Low Vulnerabilities: 4
- Total Vulnerabilities: 46

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.9p1 Ubuntu-3ubuntu0.10
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.52
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.52
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3

  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5

  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5

  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2023-25690

  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A

  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

11.13 IP Address: 159.149.30.18

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 6
- Medium Vulnerabilities: 14
- Low Vulnerabilities: 4
- Total Vulnerabilities: 24

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 9.6p1 Ubuntu 3ubuntu13.4
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.58
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.58
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2009-0796

  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1

  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A

  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5

  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2024-38276
  - CVSS Score: N/A
  - Description: Incorrect CSRF token checks resulted in multiple CSRF risks.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

11.14 IP Address: 159.149.45.8

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 6
- Medium Vulnerabilities: 14
- Low Vulnerabilities: 4
- Total Vulnerabilities: 24

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.59
  - Location: https://159.149.45.8/

Vulnerabilities Found

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477

  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5

  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5

  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6

  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

11.15 IP Address: 159.149.53.196

- Organization: UNI-Milano
- Operating System: Windows
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 2
- Low Vulnerabilities: 0
- Total Vulnerabilities: 2

Services Running on IP Address

- Service: Microsoft IIS httpd
  - Port: 443
  - Version: 10.0
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2020-11022
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.2 and before 3.5.0, passing HTML from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.
- Vulnerability: CVE-2020-11023
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.0.3 and before 3.5.0, passing HTML containing <option> elements from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.

11.16 IP Address: 159.149.53.140

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 22
- Medium Vulnerabilities: 164
- Low Vulnerabilities: 16
- Total Vulnerabilities: 206

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.6
  - Location: https://unimi.it/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.6
  - Location: https://www.unimi.it//

Vulnerabilities Found

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3

  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using 'OIDCPreservePost On'.
- Vulnerability: CVE-2024-38476

  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5

  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167

  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.17 IP Address: 159.149.106.194

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.18 IP Address: 159.149.53.217

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 2
- High Vulnerabilities: 13
- Medium Vulnerabilities: 56
- Low Vulnerabilities: 3
- Total Vulnerabilities: 74

Services Running on IP Address

- Service: Apache httpd
  - Port: 443
  - Version: 2.4.37
  - Location: https://www.unimi.it/

Vulnerabilities Found

- Vulnerability: CVE-2019-0215
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 releases 2.4.37 and 2.4.38, a bug in mod_ssl when using per-location client certificate verification with TLSv1.3 allowed a client to bypass configured access control restrictions.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2022-2068
  - CVSS Score: 10

  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).

- Vulnerability: CVE-2021-3449
  - CVSS Score: 4.3
  - Description: An OpenSSL TLS server may crash if sent a maliciously crafted renegotiation ClientHello message from a client. If a TLSv1.2 renegotiation ClientHello omits the signature_algorithms extension (where it was present in the initial ClientHello), but includes a signature_algorithms_cert extension then a NULL pointer dereference will result, leading to a crash and a denial of service attack. A server is only vulnerable if it has TLSv1.2 and renegotiation enabled (which is the default configuration). OpenSSL TLS clients are not impacted by this issue. All OpenSSL 1.1.1 versions are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1k. OpenSSL 1.0.2 is not impacted by this issue. Fixed in OpenSSL 1.1.1k (Affected 1.1.1-1.1.1j).
- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A

  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A

  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2019-0197
  - CVSS Score: 4.9
  - Description: A vulnerability was found in Apache HTTP Server 2.4.34 to 2.4.38. When HTTP/2 was enabled for a http: host or H2Upgrade was enabled for h2 on a https: host, an Upgrade request from http/1.1 to http/2 that was not the first request on a connection could lead to a misconfiguration and crash. Server that never enabled the h2 protocol or that only enabled it for https: and did not set "H2Upgrade on" are unaffected by this issue.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220

  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-3711
  - CVSS Score: 7.5
  - Description: In order to decrypt SM2 encrypted data an application is expected to call the API function EVP_PKEY_decrypt(). Typically an application will call this function twice. The first time, on entry, the "out" parameter can be NULL and, on exit, the "outlen" parameter is populated with the buffer size required to hold the decrypted plaintext. The application can then allocate a sufficiently sized buffer and call EVP_PKEY_decrypt() again, but this time passing a non-NULL value for the "out" parameter. A bug in the implementation of the SM2 decryption code means that the calculation of the buffer size required to hold the plaintext returned by the first call to EVP_PKEY_decrypt() can be smaller than the actual size required by the second call. This can lead to a buffer overflow when EVP_PKEY_decrypt() is called by the application a second time with a buffer that is too small. A malicious attacker who is able present SM2 content for decryption to an application could cause attacker chosen data to overflow the buffer by up to a maximum of 62 bytes altering the contents of other data held after the buffer, possibly changing application behaviour or causing the application to crash. The location of the buffer is application dependent but is typically heap allocated. Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k).
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4

  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2019-10097
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4.32-2.4.39, when mod_remoteip was configured to use a trusted intermediary proxy server using the "PROXY" protocol, a specially crafted PROXY header could trigger a stack buffer overflow or NULL pointer deference. This vulnerability could only be triggered by a trusted proxy and not by untrusted HTTP clients.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3
  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2020-11984

  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE

- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.

- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2022-0778
  - CVSS Score: 5
  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).
- Vulnerability: CVE-2022-2097
  - CVSS Score: 5
  - Description: AES OCB mode for 32-bit x86 platforms using the AES-NI assembly optimised implementation will not encrypt the entirety of the data under some circumstances. This could reveal sixteen bytes of data that was preexisting in the memory that wasn't written. In the special case of "in place" encryption, sixteen bytes of the plaintext would be revealed. Since OpenSSL does not support OCB based cipher suites for TLS and DTLS, they are both unaffected. Fixed in OpenSSL 3.0.5 (Affected 3.0.0-3.0.4). Fixed in OpenSSL 1.1.1q (Affected 1.1.1-1.1.1p).
- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A

  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5
  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5

  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.19 IP Address: 159.149.53.27

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 14
- Medium Vulnerabilities: 94
- Low Vulnerabilities: 12
- Total Vulnerabilities: 124

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.2.34
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.2.34
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3
  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2009-1390

  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.

- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8

  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A

  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-40438

  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3
  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A

  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3

  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.

- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3
  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9
  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3

  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).

- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3
  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5

  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5

  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3
  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2009-1390

  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.

- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8

  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A

  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2021-40438

  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3
  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A

  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3

  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.

- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3
  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9
  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3

  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).

- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3
  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5

  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5

  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

11.20 IP Address: 159.149.147.195

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 11
- Medium Vulnerabilities: 60
- Low Vulnerabilities: 5
- Total Vulnerabilities: 76

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.7
  - Location: /
- Service: OpenSSH
  - Port: 2222
  - Version: 8.2p1 Ubuntu 4ubuntu0.11
  - Location:
- Service: PostgreSQL
  - Port: 5432
  - Version: 9.1.12 - 9.1.14
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5

  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.

- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.
- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723

  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.

- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."

- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2014-0231
  - CVSS Score: 5

  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service

- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow

- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2014-3581
  - CVSS Score: 5
  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.
- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8
  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.
- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2016-5387
  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176

  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.

- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.

- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.

- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.
- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5

  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.
- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5

  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.21 IP Address: 34.252.50.82

- Organization: Amazon Data Services Ireland Limited
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 12
- Medium Vulnerabilities: 30
- Low Vulnerabilities: 4
- Total Vulnerabilities: 46

Services Running on IP Address

- Service: Apache httpd
  - Port: 443
  - Version: 2.4.52
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001

  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-22720

  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6

  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2022-22719

- CVSS Score: 5
- Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

11.22 IP Address: 159.149.103.29

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 22
- Medium Vulnerabilities: 164
- Low Vulnerabilities: 16
- Total Vulnerabilities: 206

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.6
  - Location: https://collezioni.unimi.it/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.6
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3

  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).

- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8

  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786

  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n2̂) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using 'OIDCPreservePost On'.
- Vulnerability: CVE-2024-38476

  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5

  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167

  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.23 IP Address: 159.149.145.148

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.9p1 Ubuntu-3ubuntu0.10
  - Location:
- Service: N/A
  - Port: 80
  - Version: N/A
  - Location: https://159.149.145.148/
- Service: Ollama
  - Port: 11434
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.24 IP Address: 52.101.68.29

- Organization: Microsoft Corporation
- Operating System: Windows
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: Microsoft Exchange smtpd
  - Port: 25
  - Version: N/A
  - Location:

No vulnerabilities found for this IP address.

11.25 IP Address: 159.149.129.222

- Organization: UNI-Milano
- Operating System: Windows
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 1
- Low Vulnerabilities: 0
- Total Vulnerabilities: 1

Services Running on IP Address

- Service: Microsoft IIS httpd
  - Port: 80
  - Version: 8.5
  - Location: https://docs.di.unimi.it/

Vulnerabilities Found

- Vulnerability: CVE-2014-4078
  - CVSS Score: 5.1
  - Description: The IP Security feature in Microsoft Internet Information Services (IIS) 8.0 and 8.5 does not properly process wildcard allow and deny rules for domains within the "IP Address and Domain Restrictions" list, which makes it easier for remote attackers to bypass an intended rule set via an HTTP request, aka "IIS Security Feature Bypass Vulnerability."

11.26 IP Address: 50.18.215.94

- Organization: Amazon.com, Inc.
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 4
- Low Vulnerabilities: 0
- Total Vulnerabilities: 4

Services Running on IP Address

- Service: N/A
  - Port: 80
  - Version: N/A
  - Location: https://lyonsday.com/
- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2015-9251
  - CVSS Score: 4.3
  - Description: jQuery before 3.0.0 is vulnerable to Cross-site Scripting (XSS) attacks when a cross-domain Ajax request is performed without the dataType option, causing text/javascript responses to be executed.
- Vulnerability: CVE-2019-11358
  - CVSS Score: 4.3
  - Description: jQuery before 3.4.0, as used in Drupal, Backdrop CMS, and other products, mishandles jQuery.extend(true, {}, ...) because of Object.prototype pollution. If an unsanitized source object contained an enumerable __proto__ property, it could extend the native Object.prototype.
- Vulnerability: CVE-2020-11022
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.2 and before 3.5.0, passing HTML from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.
- Vulnerability: CVE-2020-11023
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.0.3 and before 3.5.0, passing HTML containing <option> elements from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.

11.27 IP Address: 159.149.133.208

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 5
- High Vulnerabilities: 26
- Medium Vulnerabilities: 110
- Low Vulnerabilities: 7
- Total Vulnerabilities: 148

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.0
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.37
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.37
  - Location: /
- Service: PostgreSQL
  - Port: 5432
  - Version: 10.19 - 10.23
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2019-16905
  - CVSS Score: 4.4
  - Description: OpenSSH 7.7 through 7.9 and 8.x before 8.1, when compiled with an experimental key type, has a pre-authentication integer overflow if a client or server is configured to use a crafted XMSS key. This leads to memory corruption and local code execution because of an error in the XMSS key parsing algorithm. NOTE: the XMSS implementation is considered experimental in all released OpenSSH versions, and there is no supported way to enable it when building portable OpenSSH.
- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product

- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6
  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.
- Vulnerability: CVE-2020-14145
  - CVSS Score: 4.3
  - Description: The client side in OpenSSH 5.7 through 8.4 has an Observable Discrepancy leading to an information leak in the algorithm negotiation. This allows man-in-the-middle attackers to target initial connection attempts (where no host key for the server has been cached by the client). NOTE: some reports state that 8.5 and 8.6 are also affected.
- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.
- Vulnerability: CVE-2020-15778
  - CVSS Score: 6.8
  - Description: scp in OpenSSH through 8.3p1 allows command injection in the scp.c toremote function, as demonstrated by backtick characters in the destination argument. NOTE: the vendor reportedly has stated that they intentionally omit validation of "anomalous argument transfers" because that could "stand a great chance of breaking existing workflows."
- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.
- Vulnerability: CVE-2023-51385

  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.

- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.

- Vulnerability: CVE-2019-0215
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 releases 2.4.37 and 2.4.38, a bug in mod_ssl when using per-location client certificate verification with TLSv1.3 allowed a client to bypass configured access control restrictions.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2021-36160

  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2021-32786

  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n2̂) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2019-0197
  - CVSS Score: 4.9
  - Description: A vulnerability was found in Apache HTTP Server 2.4.34 to 2.4.38. When HTTP/2 was enabled for a http: host or H2Upgrade was enabled for h2 on a https: host, an Upgrade request from http/1.1 to http/2 that was not the first request on a connection could lead to a misconfiguration and crash. Server that never enabled the h2 protocol or that only enabled it for https: and did not set "H2Upgrade on" are unaffected by this issue.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220

  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-3711
  - CVSS Score: 7.5
  - Description: In order to decrypt SM2 encrypted data an application is expected to call the API function EVP_PKEY_decrypt(). Typically an application will call this function twice. The first time, on entry, the "out" parameter can be NULL and, on exit, the "outlen" parameter is populated with the buffer size required to hold the decrypted plaintext. The application can then allocate a sufficiently sized buffer and call EVP_PKEY_decrypt() again, but this time passing a non-NULL value for the "out" parameter. A bug in the implementation of the SM2 decryption code means that the calculation of the buffer size required to hold the plaintext returned by the first call to EVP_PKEY_decrypt() can be smaller than the actual size required by the second call. This can lead to a buffer overflow when EVP_PKEY_decrypt() is called by the application a second time with a buffer that is too small. A malicious attacker who is able present SM2 content for decryption to an application could cause attacker chosen data to overflow the buffer by up to a maximum of 62 bytes altering the contents of other data held after the buffer, possibly changing application behaviour or causing the application to crash. The location of the buffer is application dependent but is typically heap allocated. Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k).
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4

  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2019-10097
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4.32-2.4.39, when mod_remoteip was configured to use a trusted intermediary proxy server using the "PROXY" protocol, a specially crafted PROXY header could trigger a stack buffer overflow or NULL pointer deference. This vulnerability could only be triggered by a trusted proxy and not by untrusted HTTP clients.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3

  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2022-2097
  - CVSS Score: 5
  - Description: AES OCB mode for 32-bit x86 platforms using the AES-NI assembly optimised implementation will not encrypt the entirety of the data under some circumstances. This could reveal sixteen bytes of data that was preexisting in the memory that wasn't written. In the special case of "in place" encryption, sixteen bytes of the plaintext would be revealed. Since OpenSSL does not support OCB based cipher suites for TLS and DTLS, they are both unaffected. Fixed in OpenSSL 3.0.5 (Affected 3.0.0-3.0.4). Fixed in OpenSSL 1.1.1q (Affected 1.1.1-1.1.1p).
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).
- Vulnerability: CVE-2012-4001

  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1

  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2019-0215
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 releases 2.4.37 and 2.4.38, a bug in mod_ssl when using per-location client certificate verification with TLSv1.3 allowed a client to bypass configured access control restrictions.

- Vulnerability: CVE-2013-4365

  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A

  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).

- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A

  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A

  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are consideredrnot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2019-0197
  - CVSS Score: 4.9
  - Description: A vulnerability was found in Apache HTTP Server 2.4.34 to 2.4.38. When HTTP/2 was enabled for a http: host or H2Upgrade was enabled for h2 on a https: host, an Upgrade request from http/1.1 to http/2 that was not the first request on a connection could lead to a misconfiguration and crash. Server that never enabled the h2 protocol or that only enabled it for https: and did not set "H2Upgrade on" are unaffected by this issue.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220

  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-3711
  - CVSS Score: 7.5
  - Description: In order to decrypt SM2 encrypted data an application is expected to call the API function EVP_PKEY_decrypt(). Typically an application will call this function twice. The first time, on entry, the "out" parameter can be NULL and, on exit, the "outlen" parameter is populated with the buffer size required to hold the decrypted plaintext. The application can then allocate a sufficiently sized buffer and call EVP_PKEY_decrypt() again, but this time passing a non-NULL value for the "out" parameter. A bug in the implementation of the SM2 decryption code means that the calculation of the buffer size required to hold the plaintext returned by the first call to EVP_PKEY_decrypt() can be smaller than the actual size required by the second call. This can lead to a buffer overflow when EVP_PKEY_decrypt() is called by the application a second time with a buffer that is too small. A malicious attacker who is able present SM2 content for decryption to an application could cause attacker chosen data to overflow the buffer by up to a maximum of 62 bytes altering the contents of other data held after the buffer, possibly changing application behaviour or causing the application to crash. The location of the buffer is application dependent but is typically heap allocated. Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k).
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4

  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2019-10097
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4.32-2.4.39, when mod_remoteip was configured to use a trusted intermediary proxy server using the "PROXY" protocol, a specially crafted PROXY header could trigger a stack buffer overflow or NULL pointer deference. This vulnerability could only be triggered by a trusted proxy and not by untrusted HTTP clients.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "̂here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3

  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2022-2097
  - CVSS Score: 5
  - Description: AES OCB mode for 32-bit x86 platforms using the AES-NI assembly optimised implementation will not encrypt the entirety of the data under some circumstances. This could reveal sixteen bytes of data that was preexisting in the memory that wasn't written. In the special case of "in place" encryption, sixteen bytes of the plaintext would be revealed. Since OpenSSL does not support OCB based cipher suites for TLS and DTLS, they are both unaffected. Fixed in OpenSSL 3.0.5 (Affected 3.0.0-3.0.4). Fixed in OpenSSL 1.1.1q (Affected 1.1.1-1.1.1p).
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).
- Vulnerability: CVE-2012-4001

  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1

  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.28 IP Address: 159.149.45.44

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 22
- Medium Vulnerabilities: 164
- Low Vulnerabilities: 16
- Total Vulnerabilities: 206

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.6
  - Location: https://cdd-rappresentanti.fisica.unimi.it
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.6
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3

  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using 'OIDCPreservePost On'.
- Vulnerability: CVE-2024-38476

  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5

  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167

  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.29 IP Address: 159.149.133.34

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 20
- Medium Vulnerabilities: 69
- Low Vulnerabilities: 6
- Total Vulnerabilities: 95

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.2p1 Ubuntu-4ubuntu0.11
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.41
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.41
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2021-30641
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.39 to 2.4.46 Unexpected matching behavior with 'MergeSlashes OFF'
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5

  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A

  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8

  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the 'Cache-Digest' header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942

  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service

- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows

- Vulnerability: CVE-2009-2299

  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2020-13950
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.41 to 2.4.46 mod_proxy_http can be made to crash (NULL pointer dereference) with specially crafted requests using both Content-Length and Transfer-Encoding headers, leading to a Denial of Service

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2021-30641
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.39 to 2.4.46 Unexpected matching behavior with 'MergeSlashes OFF'
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2020-11022
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.2 and before 3.5.0, passing HTML from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.
- Vulnerability: CVE-2020-11023
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.0.3 and before 3.5.0, passing HTML containing <option> elements from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2019-11358
  - CVSS Score: 4.3
  - Description: jQuery before 3.4.0, as used in Drupal, Backdrop CMS, and other products, mishandles jQuery.extend(true, {}, ...) because of Object.prototype pollution. If an unsanitized source object contained an enumerable __proto__ property, it could extend the native Object.prototype.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2020-13950
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.41 to 2.4.46 mod_proxy_http can be made to crash (NULL pointer dereference) with specially crafted requests using both Content-Length and Transfer-Encoding headers, leading to a Denial of Service
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4

  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.

11.30 IP Address: 159.149.147.185

- Organization: UNI-Milano
- Operating System: Linux
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.9p1 Ubuntu 3ubuntu0.10
  - Location:
- Service: N/A
  - Port: 3001
  - Version: N/A
  - Location:
- Service: N/A
  - Port: 4444
  - Version: N/A
  - Location:
- Service: Neo4j Browser
  - Port: 7474
  - Version: 5.15.0
  - Location: /

No vulnerabilities found for this IP address.

11.31 IP Address: 159.149.10.1

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 53
  - Version: N/A
  - Location:
- Service: N/A
  - Port: 53
  - Version: N/A
  - Location:
- Service: N/A
  - Port: 123
  - Version: N/A
  - Location:

No vulnerabilities found for this IP address.

11.32 IP Address: 159.149.45.27

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 24
- Medium Vulnerabilities: 165
- Low Vulnerabilities: 16
- Total Vulnerabilities: 209

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.6
  - Location: https://forum.indaco.unimi.it/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.6
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3

  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).

- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8

  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786

  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n2̂) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2024-4577
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using 'OIDCPreservePost On'.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2013-6438

  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2017-8923
  - CVSS Score: 7.5
  - Description: The zend_string_extend function in Zend/zend_string.h in PHP through 7.1.5 does not prevent changes to string objects that result in a negative length, which allows remote attackers to cause a denial of service (application crash) or possibly have unspecified other impact by leveraging a script's use of .= with a long string.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A
  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.
- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2022-31628
  - CVSS Score: N/A
  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the phar uncompressor code would recursively uncompress "quines" gzip files, resulting in an infinite loop.
- Vulnerability: CVE-2022-31629
  - CVSS Score: N/A
  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the vulnerability enables network and same-site attackers to set a standard insecure cookie in the victim's browser which is treated as a '__Host-' or '__Secure-' cookie by PHP applications.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are consideredrnot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5

  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.

- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."

- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service

- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5
  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.
- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2022-37454
  - CVSS Score: N/A
  - Description: The Keccak XKCP SHA-3 reference implementation before fdc6fef has an integer overflow and resultant buffer overflow that allows attackers to execute arbitrary code or eliminate expected cryptographic properties. This occurs in the sponge function interface.
- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.
- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.
- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8
  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.
- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.
- Vulnerability: CVE-2016-5387
  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.
- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8

  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.

- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.

- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3
  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "̃here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.

- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.
- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2022-0778
  - CVSS Score: 5
  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).
- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3

  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.

- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3
  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.33 IP Address: 159.149.130.110

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 5
- High Vulnerabilities: 30
- Medium Vulnerabilities: 144
- Low Vulnerabilities: 9
- Total Vulnerabilities: 188

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.0
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.37
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.37
  - Location: /
- Service: N/A
  - Port: 9418
  - Version: N/A
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2019-16905
  - CVSS Score: 4.4
  - Description: OpenSSH 7.7 through 7.9 and 8.x before 8.1, when compiled with an experimental key type, has a pre-authentication integer overflow if a client or server is configured to use a crafted XMSS key. This leads to memory corruption and local code execution because of an error in the XMSS key parsing algorithm. NOTE: the XMSS implementation is considered experimental in all released OpenSSH versions, and there is no supported way to enable it when building portable OpenSSH.
- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product

- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6
  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.
- Vulnerability: CVE-2020-14145
  - CVSS Score: 4.3
  - Description: The client side in OpenSSH 5.7 through 8.4 has an Observable Discrepancy leading to an information leak in the algorithm negotiation. This allows man-in-the-middle attackers to target initial connection attempts (where no host key for the server has been cached by the client). NOTE: some reports state that 8.5 and 8.6 are also affected.
- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.
- Vulnerability: CVE-2020-15778
  - CVSS Score: 6.8
  - Description: scp in OpenSSH through 8.3p1 allows command injection in the scp.c toremote function, as demonstrated by backtick characters in the destination argument. NOTE: the vendor reportedly has stated that they intentionally omit validation of "anomalous argument transfers" because that could "stand a great chance of breaking existing workflows."
- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.
- Vulnerability: CVE-2023-51385

  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.
- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.
- Vulnerability: CVE-2019-0215
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 releases 2.4.37 and 2.4.38, a bug in mod_ssl when using per-location client certificate verification with TLSv1.3 allowed a client to bypass configured access control restrictions.
- Vulnerability: CVE-2024-4577
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2020-7070
  - CVSS Score: 5
  - Description: In PHP versions 7.2.x below 7.2.34, 7.3.x below 7.3.23 and 7.4.x below 7.4.11, when PHP is processing incoming HTTP cookie values, the cookie names are url-decoded. This may lead to cookies with prefixes like __Host confused with cookies that decode to such prefix, thus leading to an attacker being able to forge cookie which is supposed to be secure. See also CVE-2020-8184 for more information.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A

  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2020-7061
  - CVSS Score: 6.4
  - Description: In PHP versions 7.3.x below 7.3.15 and 7.4.x below 7.4.3, while extracting PHAR files on Windows using phar extension, certain content inside PHAR file could lead to one-byte read past the allocated buffer. This could potentially lead to information disclosure or crash.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the 'Cache-Digest' header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2020-7060
  - CVSS Score: 6.4
  - Description: When using certain mbstring functions to convert multibyte encodings, in PHP versions 7.2.x below 7.2.27, 7.3.x below 7.3.14 and 7.4.x below 7.4.2 it is possible to supply data that will cause function mbfl_filt_conv_big5_wchar to read past the allocated buffer. This may lead to information disclosure or crash.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2020-7062
  - CVSS Score: 4.3
  - Description: In PHP versions 7.2.x below 7.2.28, 7.3.x below 7.3.15 and 7.4.x below 7.4.3, when using file upload functionality, if upload progress tracking is enabled, but session.upload_progress.cleanup is set to 0 (disabled), and the file upload fails, the upload procedure would try to clean up data that does not exist and encounter null pointer dereference, which would likely lead to a crash.
- Vulnerability: CVE-2020-7063
  - CVSS Score: 5
  - Description: In PHP versions 7.2.x below 7.2.28, 7.3.x below 7.3.15 and 7.4.x below 7.4.3, when creating PHAR archive using PharData::buildFromIterator() function, the files are added with default permissions (0666, or all access) even if the original files on the filesystem were with more restrictive permissions. This may result in files having more lax permissions than intended when such archive is extracted.
- Vulnerability: CVE-2020-7064
  - CVSS Score: 5.8

  - Description: In PHP versions 7.2.x below 7.2.9, 7.3.x below 7.3.16 and 7.4.x below 7.4.4, while parsing EXIF data with exif_read_data() function, it is possible for malicious data to cause PHP to read one byte of uninitialized memory. This could potentially lead to information disclosure or crash.

- Vulnerability: CVE-2020-7066
  - CVSS Score: 4.3
  - Description: In PHP versions 7.2.x below 7.2.29, 7.3.x below 7.3.16 and 7.4.x below 7.4.4, while using get_headers() with user-supplied URL, if the URL contains zero (\{}0) character, the URL will be silently truncated at it. This may cause some software to make incorrect assumptions about the target of the get_headers() and possibly send some information to a wrong server.

- Vulnerability: CVE-2020-7067
  - CVSS Score: 5
  - Description: In PHP versions 7.2.x below 7.2.30, 7.3.x below 7.3.17 and 7.4.x below 7.4.5, if PHP is compiled with EBCDIC support (uncommon), urldecode() function can be made to access locations past the allocated memory, due to erroneously using signed numbers as array indexes.

- Vulnerability: CVE-2020-7068
  - CVSS Score: 3.3
  - Description: In PHP versions 7.2.x below 7.2.33, 7.3.x below 7.3.21 and 7.4.x below 7.4.9, while processing PHAR files using phar extension, phar_parse_zipfile could be tricked into accessing freed memory, which could lead to a crash or information disclosure.

- Vulnerability: CVE-2020-7069
  - CVSS Score: 6.4
  - Description: In PHP versions 7.2.x below 7.2.34, 7.3.x below 7.3.23 and 7.4.x below 7.4.11, when AES-CCM mode is used with openssl_encrypt() function with 12 bytes IV, only first 7 bytes of the IV is actually used. This can lead to both decreased security and incorrect encryption data.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows

- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A

  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2022-31628
  - CVSS Score: N/A
  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the phar uncompressor code would recursively uncompress "quines" gzip files, resulting in an infinite loop.
- Vulnerability: CVE-2022-31629

  - CVSS Score: N/A
  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the vulnerability enables network and same-site attackers to set a standard insecure cookie in the victim's browser which is treated as a '__Host-' or '__Secure-' cookie by PHP applications.

- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.

- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2017-8923
  - CVSS Score: 7.5
  - Description: The zend_string_extend function in Zend/zend_string.h in PHP through 7.1.5 does not prevent changes to string objects that result in a negative length, which allows remote attackers to cause a denial of service (application crash) or possibly have unspecified other impact by leveraging a script's use of .= with a long string.

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2019-0197
  - CVSS Score: 4.9

  - Description: A vulnerability was found in Apache HTTP Server 2.4.34 to 2.4.38. When HTTP/2 was enabled for a http: host or H2Upgrade was enabled for h2 on a https: host, an Upgrade request from http/1.1 to http/2 that was not the first request on a connection could lead to a misconfiguration and crash. Server that never enabled the h2 protocol or that only enabled it for https: and did not set "H2Upgrade on" are unaffected by this issue.

- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.

- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.

- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.

- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2013-2220

  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A
  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2022-37454
  - CVSS Score: N/A
  - Description: The Keccak XKCP SHA-3 reference implementation before fdc6fef has an integer overflow and resultant buffer overflow that allows attackers to execute arbitrary code or eliminate expected cryptographic properties. This occurs in the sponge function interface.
- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8

  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2021-3711
  - CVSS Score: 7.5

  - Description: In order to decrypt SM2 encrypted data an application is expected to call the API function EVP_PKEY_decrypt(). Typically an application will call this function twice. The first time, on entry, the "out" parameter can be NULL and, on exit, the "outlen" parameter is populated with the buffer size required to hold the decrypted plaintext. The application can then allocate a sufficiently sized buffer and call EVP_PKEY_decrypt() again, but this time passing a non-NULL value for the "out" parameter. A bug in the implementation of the SM2 decryption code means that the calculation of the buffer size required to hold the plaintext returned by the first call to EVP_PKEY_decrypt() can be smaller than the actual size required by the second call. This can lead to a buffer overflow when EVP_PKEY_decrypt() is called by the application a second time with a buffer that is too small. A malicious attacker who is able present SM2 content for decryption to an application could cause attacker chosen data to overflow the buffer by up to a maximum of 62 bytes altering the contents of other data held after the buffer, possibly changing application behaviour or causing the application to crash. The location of the buffer is application dependent but is typically heap allocated. Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k).

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2019-10097
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4.32-2.4.39, when mod_remoteip was configured to use a trusted intermediary proxy server using the "PROXY" protocol, a specially crafted PROXY header could trigger a stack buffer overflow or NULL pointer deference. This vulnerability could only be triggered by a trusted proxy and not by untrusted HTTP clients.

- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5
  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).
- Vulnerability: CVE-2022-2097
  - CVSS Score: 5
  - Description: AES OCB mode for 32-bit x86 platforms using the AES-NI assembly optimised implementation will not encrypt the entirety of the data under some circumstances. This could reveal sixteen bytes of data that was preexisting in the memory that wasn't written. In the special case of "in place" encryption, sixteen bytes of the plaintext would be revealed. Since OpenSSL does not support OCB based cipher suites for TLS and DTLS, they are both unaffected. Fixed in OpenSSL 3.0.5 (Affected 3.0.0-3.0.4). Fixed in OpenSSL 1.1.1q (Affected 1.1.1-1.1.1p).
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8

  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2020-7059
  - CVSS Score: 6.4
  - Description: When using fgetss() function to read data with stripping tags, in PHP versions 7.2.x below 7.2.27, 7.3.x below 7.3.14 and 7.4.x below 7.4.2 it is possible to supply data that will cause this function to read past the allocated buffer. This may lead to information disclosure or crash.

- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).
- Vulnerability: CVE-2019-11048
  - CVSS Score: 5
  - Description: In PHP versions 7.2.x below 7.2.31, 7.3.x below 7.3.18 and 7.4.x below 7.4.6, when HTTP file uploads are allowed, supplying overly long filenames or field names could lead PHP engine to try to allocate oversized memory storage, hit the memory limit and stop processing the request, without cleaning up temporary files created by upload request. This potentially could lead to accumulation of uncleaned temporary files exhausting the disk space on the target server.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2019-11046
  - CVSS Score: 5
  - Description: In PHP versions 7.2.x below 7.2.26, 7.3.x below 7.3.13 and 7.4.0, PHP bcmath extension functions on some systems, including Windows, can be tricked into reading beyond the allocated space by supplying it with string containing characters that are identified as numeric by the OS but aren't ASCII numbers. This can read to disclosure of the content of some memory locations.
- Vulnerability: CVE-2019-11047
  - CVSS Score: 6.4
  - Description: When PHP EXIF extension is parsing EXIF information from an image, e.g. via exif_read_data() function, in PHP versions 7.2.x below 7.2.26, 7.3.x below 7.3.13 and 7.4.0 it is possible to supply it with data what will cause it to read past the allocated buffer. This may lead to information disclosure or crash.
- Vulnerability: CVE-2019-11044
  - CVSS Score: 5
  - Description: In PHP versions 7.2.x below 7.2.26, 7.3.x below 7.3.13 and 7.4.0 on Windows, PHP link() function accepts filenames with embedded \{}0 byte and treats them as terminating at that byte. This could lead to security vulnerabilities, e.g. in applications checking paths that the code is allowed to access.
- Vulnerability: CVE-2019-11045

  - CVSS Score: 4.3
  - Description: In PHP versions 7.2.x below 7.2.26, 7.3.x below 7.3.13 and 7.4.0, PHP DirectoryIterator class accepts filenames with embedded \{}0 byte and treats them as terminating at that byte. This could lead to security vulnerabilities, e.g. in applications checking paths that the code is allowed to access.

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942

  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2019-11050
  - CVSS Score: 6.4
  - Description: When PHP EXIF extension is parsing EXIF information from an image, e.g. via exif_read_data() function, in PHP versions 7.2.x below 7.2.26, 7.3.x below 7.3.13 and 7.4.0 it is possible to supply it with data what will cause it to read past the allocated buffer. This may lead to information disclosure or crash.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2019-0215
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 releases 2.4.37 and 2.4.38, a bug in mod_ssl when using per-location client certificate verification with TLSv1.3 allowed a client to bypass configured access control restrictions.

- Vulnerability: CVE-2024-4577
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2020-7070
  - CVSS Score: 5
  - Description: In PHP versions 7.2.x below 7.2.34, 7.3.x below 7.3.23 and 7.4.x below 7.4.11, when PHP is processing incoming HTTP cookie values, the cookie names are url-decoded. This may lead to cookies with prefixes like __Host confused with cookies that decode to such prefix, thus leading to an attacker being able to forge cookie which is supposed to be secure. See also CVE-2020-8184 for more information.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2020-7061
  - CVSS Score: 6.4

  - Description: In PHP versions 7.3.x below 7.3.15 and 7.4.x below 7.4.3, while extracting PHAR files on Windows using phar extension, certain content inside PHAR file could lead to one-byte read past the allocated buffer. This could potentially lead to information disclosure or crash.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2021-32786

  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2020-7060
  - CVSS Score: 6.4
  - Description: When using certain mbstring functions to convert multibyte encodings, in PHP versions 7.2.x below 7.2.27, 7.3.x below 7.3.14 and 7.4.x below 7.4.2 it is possible to supply data that will cause function mbfl_filt_conv_big5_wchar to read past the allocated buffer. This may lead to information disclosure or crash.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2020-7062
  - CVSS Score: 4.3
  - Description: In PHP versions 7.2.x below 7.2.28, 7.3.x below 7.3.15 and 7.4.x below 7.4.3, when using file upload functionality, if upload progress tracking is enabled, but session.upload_progress.cleanup is set to 0 (disabled), and the file upload fails, the upload procedure would try to clean up data that does not exist and encounter null pointer dereference, which would likely lead to a crash.
- Vulnerability: CVE-2020-7063
  - CVSS Score: 5
  - Description: In PHP versions 7.2.x below 7.2.28, 7.3.x below 7.3.15 and 7.4.x below 7.4.3, when creating PHAR archive using PharData::buildFromIterator() function, the files are added with default permissions (0666, or all access) even if the original files on the filesystem were with more restrictive permissions. This may result in files having more lax permissions than intended when such archive is extracted.
- Vulnerability: CVE-2020-7064
  - CVSS Score: 5.8
  - Description: In PHP versions 7.2.x below 7.2.9, 7.3.x below 7.3.16 and 7.4.x below 7.4.4, while parsing EXIF data with exif_read_data() function, it is possible for malicious data to cause PHP to read one byte of uninitialized memory. This could potentially lead to information disclosure or crash.
- Vulnerability: CVE-2020-7066
  - CVSS Score: 4.3
  - Description: In PHP versions 7.2.x below 7.2.29, 7.3.x below 7.3.16 and 7.4.x below 7.4.4, while using get_headers() with user-supplied URL, if the URL contains zero (\{}0) character, the URL will be silently truncated at it. This may cause some software to make incorrect assumptions about the target of the get_headers() and possibly send some information to a wrong server.
- Vulnerability: CVE-2020-7067
  - CVSS Score: 5
  - Description: In PHP versions 7.2.x below 7.2.30, 7.3.x below 7.3.17 and 7.4.x below 7.4.5, if PHP is compiled with EBCDIC support (uncommon), urldecode() function can be made to access locations past the allocated memory, due to erroneously using signed numbers as array indexes.
- Vulnerability: CVE-2020-7068
  - CVSS Score: 3.3

  - Description: In PHP versions 7.2.x below 7.2.33, 7.3.x below 7.3.21 and 7.4.x below 7.4.9, while processing PHAR files using phar extension, phar_parse_zipfile could be tricked into accessing freed memory, which could lead to a crash or information disclosure.

- Vulnerability: CVE-2020-7069
  - CVSS Score: 6.4
  - Description: In PHP versions 7.2.x below 7.2.34, 7.3.x below 7.3.23 and 7.4.x below 7.4.11, when AES-CCM mode is used with openssl_encrypt() function with 12 bytes IV, only first 7 bytes of the IV is actually used. This can lead to both decreased security and incorrect encryption data.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows

- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A

  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are consideredrnot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2022-31628
  - CVSS Score: N/A
  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the phar uncompressor code would recursively uncompress "quines" gzip files, resulting in an infinite loop.
- Vulnerability: CVE-2022-31629

  - CVSS Score: N/A
  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the vulnerability enables network and same-site attackers to set a standard insecure cookie in the victim's browser which is treated as a '__Host-' or '__Secure-' cookie by PHP applications.

- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.

- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2017-8923
  - CVSS Score: 7.5
  - Description: The zend_string_extend function in Zend/zend_string.h in PHP through 7.1.5 does not prevent changes to string objects that result in a negative length, which allows remote attackers to cause a denial of service (application crash) or possibly have unspecified other impact by leveraging a script's use of .= with a long string.

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2019-0197
  - CVSS Score: 4.9

  - Description: A vulnerability was found in Apache HTTP Server 2.4.34 to 2.4.38. When HTTP/2 was enabled for a http: host or H2Upgrade was enabled for h2 on a https: host, an Upgrade request from http/1.1 to http/2 that was not the first request on a connection could lead to a misconfiguration and crash. Server that never enabled the h2 protocol or that only enabled it for https: and did not set "H2Upgrade on" are unaffected by this issue.

- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.

- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.

- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.

- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2013-2220

  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A
  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2022-37454
  - CVSS Score: N/A
  - Description: The Keccak XKCP SHA-3 reference implementation before fdc6fef has an integer overflow and resultant buffer overflow that allows attackers to execute arbitrary code or eliminate expected cryptographic properties. This occurs in the sponge function interface.
- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8

  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2021-3711
  - CVSS Score: 7.5

  - Description: In order to decrypt SM2 encrypted data an application is expected to call the API function EVP_PKEY_decrypt(). Typically an application will call this function twice. The first time, on entry, the "out" parameter can be NULL and, on exit, the "outlen" parameter is populated with the buffer size required to hold the decrypted plaintext. The application can then allocate a sufficiently sized buffer and call EVP_PKEY_decrypt() again, but this time passing a non-NULL value for the "out" parameter. A bug in the implementation of the SM2 decryption code means that the calculation of the buffer size required to hold the plaintext returned by the first call to EVP_PKEY_decrypt() can be smaller than the actual size required by the second call. This can lead to a buffer overflow when EVP_PKEY_decrypt() is called by the application a second time with a buffer that is too small. A malicious attacker who is able present SM2 content for decryption to an application could cause attacker chosen data to overflow the buffer by up to a maximum of 62 bytes altering the contents of other data held after the buffer, possibly changing application behaviour or causing the application to crash. The location of the buffer is application dependent but is typically heap allocated. Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k).

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2019-10097
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4.32-2.4.39, when mod_remoteip was configured to use a trusted intermediary proxy server using the "PROXY" protocol, a specially crafted PROXY header could trigger a stack buffer overflow or NULL pointer deference. This vulnerability could only be triggered by a trusted proxy and not by untrusted HTTP clients.

- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5
  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).
- Vulnerability: CVE-2022-2097
  - CVSS Score: 5
  - Description: AES OCB mode for 32-bit x86 platforms using the AES-NI assembly optimised implementation will not encrypt the entirety of the data under some circumstances. This could reveal sixteen bytes of data that was preexisting in the memory that wasn't written. In the special case of "in place" encryption, sixteen bytes of the plaintext would be revealed. Since OpenSSL does not support OCB based cipher suites for TLS and DTLS, they are both unaffected. Fixed in OpenSSL 3.0.5 (Affected 3.0.0-3.0.4). Fixed in OpenSSL 1.1.1q (Affected 1.1.1-1.1.1p).
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8

  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2020-7059
  - CVSS Score: 6.4
  - Description: When using fgetss() function to read data with stripping tags, in PHP versions 7.2.x below 7.2.27, 7.3.x below 7.3.14 and 7.4.x below 7.4.2 it is possible to supply data that will cause this function to read past the allocated buffer. This may lead to information disclosure or crash.

- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).
- Vulnerability: CVE-2019-11048
  - CVSS Score: 5
  - Description: In PHP versions 7.2.x below 7.2.31, 7.3.x below 7.3.18 and 7.4.x below 7.4.6, when HTTP file uploads are allowed, supplying overly long filenames or field names could lead PHP engine to try to allocate oversized memory storage, hit the memory limit and stop processing the request, without cleaning up temporary files created by upload request. This potentially could lead to accumulation of uncleaned temporary files exhausting the disk space on the target server.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2019-11046
  - CVSS Score: 5
  - Description: In PHP versions 7.2.x below 7.2.26, 7.3.x below 7.3.13 and 7.4.0, PHP bcmath extension functions on some systems, including Windows, can be tricked into reading beyond the allocated space by supplying it with string containing characters that are identified as numeric by the OS but aren't ASCII numbers. This can read to disclosure of the content of some memory locations.
- Vulnerability: CVE-2019-11047
  - CVSS Score: 6.4
  - Description: When PHP EXIF extension is parsing EXIF information from an image, e.g. via exif_read_data() function, in PHP versions 7.2.x below 7.2.26, 7.3.x below 7.3.13 and 7.4.0 it is possible to supply it with data what will cause it to read past the allocated buffer. This may lead to information disclosure or crash.
- Vulnerability: CVE-2019-11044
  - CVSS Score: 5
  - Description: In PHP versions 7.2.x below 7.2.26, 7.3.x below 7.3.13 and 7.4.0 on Windows, PHP link() function accepts filenames with embedded \{}0 byte and treats them as terminating at that byte. This could lead to security vulnerabilities, e.g. in applications checking paths that the code is allowed to access.
- Vulnerability: CVE-2019-11045

  - CVSS Score: 4.3
  - Description: In PHP versions 7.2.x below 7.2.26, 7.3.x below 7.3.13 and 7.4.0, PHP DirectoryIterator class accepts filenames with embedded \{}0 byte and treats them as terminating at that byte. This could lead to security vulnerabilities, e.g. in applications checking paths that the code is allowed to access.

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942

  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2019-11050
  - CVSS Score: 6.4
  - Description: When PHP EXIF extension is parsing EXIF information from an image, e.g. via exif_read_data() function, in PHP versions 7.2.x below 7.2.26, 7.3.x below 7.3.13 and 7.4.0 it is possible to supply it with data what will cause it to read past the allocated buffer. This may lead to information disclosure or crash.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.34 IP Address: 159.149.136.2

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 6
- Medium Vulnerabilities: 14
- Low Vulnerabilities: 4
- Total Vulnerabilities: 24

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.62
  - Location: https://mameli.docenti.di.unimi.it/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.62
  - Location: /
- Service: OpenSSH
  - Port: 8080
  - Version: 9.2p1 Debian 2+deb12u3
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5

  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5

  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3

  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

11.35 IP Address: 159.149.96.86

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 9.7
  - Location:
- Service: nginx
  - Port: 80
  - Version: N/A
  - Location: /
- Service: nginx
  - Port: 443
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.36 IP Address: 159.149.147.98

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 0
- Medium Vulnerabilities: 7
- Low Vulnerabilities: 1
- Total Vulnerabilities: 9

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.2
  - Location:
- Service: nginx
  - Port: 80
  - Version: N/A
  - Location: /
- Service: nginx
  - Port: 443
  - Version: N/A
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2020-12062
  - CVSS Score: 5
  - Description: The scp client in OpenSSH 8.2 incorrectly sends duplicate responses to the server upon a utimes system call failure, which allows a malicious unprivileged user on the remote server to overwrite arbitrary files in the client's download directory by creating a crafted subdirectory anywhere on the remote server. The victim must use the command scp -rp to download a file hierarchy containing, anywhere inside, this crafted subdirectory. NOTE: the vendor points out that "this attack can achieve no more than a hostile peer is already able to achieve within the scp protocol" and "utimes does not fail under normal circumstances.
- Vulnerability: CVE-2021-36368

  - CVSS Score: 2.6
  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.

- Vulnerability: CVE-2021-28041
  - CVSS Score: 4.6
  - Description: ssh-agent in OpenSSH before 8.5 has a double free that may be relevant in a few less-common scenarios, such as unconstrained agent-socket access on a legacy operating system, or the forwarding of an agent to an attacker-controlled host.

- Vulnerability: CVE-2020-14145
  - CVSS Score: 4.3
  - Description: The client side in OpenSSH 5.7 through 8.4 has an Observable Discrepancy leading to an information leak in the algorithm negotiation. This allows man-in-the-middle attackers to target initial connection attempts (where no host key for the server has been cached by the client). NOTE: some reports state that 8.5 and 8.6 are also affected.

- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.

- Vulnerability: CVE-2020-15778
  - CVSS Score: 6.8
  - Description: scp in OpenSSH through 8.3p1 allows command injection in the scp.c toremote function, as demonstrated by backtick characters in the destination argument. NOTE: the vendor reportedly has stated that they intentionally omit validation of "anomalous argument transfers" because that could "stand a great chance of breaking existing workflows."

- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.
- Vulnerability: CVE-2023-51385

  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.

- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.

11.37 IP Address: 35.156.224.161

- Organization: A100 ROW GmbH
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 80
  - Version: N/A
  - Location: https://neon-dusk-9b7a25.netlify.app/
- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.38 IP Address: 159.149.53.33

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 1194
  - Version: N/A
  - Location:

No vulnerabilities found for this IP address.

11.39 IP Address: 159.149.133.149

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 24
- Medium Vulnerabilities: 166
- Low Vulnerabilities: 16
- Total Vulnerabilities: 210

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.6
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.6
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3

  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2024-4577
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792

  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3

  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A

  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A

  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.
- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5

  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service

- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow

- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.

- Vulnerability: CVE-2022-30556

  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2014-3581
  - CVSS Score: 5
  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.
- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8
  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3

  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.
- Vulnerability: CVE-2016-5387
  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.
- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8

  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.

- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.

- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3
  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3

  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.

- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.
- Vulnerability: CVE-2016-8743
  - CVSS Score: 5

  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5
  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3
  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2024-5458
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, due to a code logic error, filtering functions such as filter_var when validating URLs(FILTER_VALIDATE_URL) for certain types of URLs the function will result in invalid user information (username + password part of URLs) being treated as valid user information. This may lead to the downstream code accepting invalid URLs as valid and parsing them incorrectly.

- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2022-28615

  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.

- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.

- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.

- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5

  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2024-4577
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using 'OIDCPreservePost On'.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A

  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5

  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167

  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.
- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5

  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service

- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow

- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.

- Vulnerability: CVE-2022-30556

  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2014-3581
  - CVSS Score: 5
  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.
- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8
  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3

  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.
- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.
- Vulnerability: CVE-2016-5387
  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.
- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8

  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.

- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.

- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3
  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3

  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.

- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).

- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5

  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5
  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3
  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2024-5458
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, due to a code logic error, filtering functions such as filter_var when validating URLs(FILTER_VALIDATE_URL) for certain types of URLs the function will result in invalid user information (username + password part of URLs) being treated as valid user information. This may lead to the downstream code accepting invalid URLs as valid and parsing them incorrectly.

- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2022-28615

  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.40 IP Address: 159.149.53.16

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 5
- High Vulnerabilities: 31
- Medium Vulnerabilities: 231
- Low Vulnerabilities: 21
- Total Vulnerabilities: 288

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.6
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.6
  - Location: /
- Service: N/A
  - Port: 6443
  - Version: N/A
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.

- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.
- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8

  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786

  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n2̂) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using 'OIDCPreservePost On'.
- Vulnerability: CVE-2024-38476

  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5

  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167

  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2020-7041
  - CVSS Score: 5
  - Description: An issue was discovered in openfortivpn 1.11.0 when used with OpenSSL 1.0.2 or later. tunnel.c mishandles certificate validation because an X509_check_host negative error code is interpreted as a successful return value.

- Vulnerability: CVE-2015-3196
  - CVSS Score: 4.3
  - Description: ssl/s3_clnt.c in OpenSSL 1.0.0 before 1.0.0t, 1.0.1 before 1.0.1p, and 1.0.2 before 1.0.2d, when used for a multi-threaded client, writes the PSK identity hint to an incorrect data structure, which allows remote servers to cause a denial of service (race condition and double free) via a crafted ServerKeyExchange message.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2012-0027
  - CVSS Score: 5
  - Description: The GOST ENGINE in OpenSSL before 1.0.0f does not properly handle invalid parameters for the GOST block cipher, which allows remote attackers to cause a denial of service (daemon crash) via crafted data from a TLS client.

- Vulnerability: CVE-2011-4577
  - CVSS Score: 4.3

  - Description: OpenSSL before 0.9.8s and 1.x before 1.0.0f, when RFC 3779 support is enabled, allows remote attackers to cause a denial of service (assertion failure) via an X.509 certificate containing certificate-extension data associated with (1) IP address blocks or (2) Autonomous System (AS) identifiers.

- Vulnerability: CVE-2011-4576
  - CVSS Score: 5
  - Description: The SSL 3.0 implementation in OpenSSL before 0.9.8s and 1.x before 1.0.0f does not properly initialize data structures for block cipher padding, which might allow remote attackers to obtain sensitive information by decrypting the padding data sent by an SSL peer.

- Vulnerability: CVE-2014-0076
  - CVSS Score: 1.9
  - Description: The Montgomery ladder implementation in OpenSSL through 1.0.0l does not ensure that certain swap operations have a constant-time behavior, which makes it easier for local users to obtain ECDSA nonces via a FLUSH+RELOAD cache side-channel attack.

- Vulnerability: CVE-2009-4355
  - CVSS Score: 5
  - Description: Memory leak in the zlib_stateful_finish function in crypto/comp/c_zlib.c in OpenSSL 0.9.8l and earlier and 1.0.0 Beta through Beta 4 allows remote attackers to cause a denial of service (memory consumption) via vectors that trigger incorrect calls to the CRYPTO_cleanup_all_ex_data function, as demonstrated by use of SSLv3 and PHP with the Apache HTTP Server, a related issue to CVE-2008-1678.

- Vulnerability: CVE-2012-2333
  - CVSS Score: 6.8
  - Description: Integer underflow in OpenSSL before 0.9.8x, 1.0.0 before 1.0.0j, and 1.0.1 before 1.0.1c, when TLS 1.1, TLS 1.2, or DTLS is used with CBC encryption, allows remote attackers to cause a denial of service (buffer over-read) or possibly have unspecified other impact via a crafted TLS packet that is not properly handled during a certain explicit IV calculation.

- Vulnerability: CVE-2011-1945
  - CVSS Score: 2.6
  - Description: The elliptic curve cryptography (ECC) subsystem in OpenSSL 1.0.0d and earlier, when the Elliptic Curve Digital Signature Algorithm (ECDSA) is used for the ECDHE_ECDSA cipher suite, does not properly implement curves over binary fields, which makes it easier for context-dependent attackers to determine private keys via a timing attack and a lattice calculation.

- Vulnerability: CVE-2014-3470
  - CVSS Score: 4.3
  - Description: The ssl3_send_client_key_exchange function in s3_clnt.c in OpenSSL before 0.9.8za, 1.0.0 before 1.0.0m, and 1.0.1 before 1.0.1h, when an anonymous ECDH cipher suite is used, allows remote attackers to cause a denial of service (NULL pointer dereference and client crash) by triggering a NULL certificate value.

- Vulnerability: CVE-2015-1789

  - CVSS Score: 4.3
  - Description: The X509_cmp_time function in crypto/x509/x509_vfy.c in OpenSSL before 0.9.8zg, 1.0.0 before 1.0.0s, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b allows remote attackers to cause a denial of service (out-of-bounds read and application crash) via a crafted length field in ASN1_TIME data, as demonstrated by an attack against a server that supports client authentication with a custom verification callback.

- Vulnerability: CVE-2015-1788
  - CVSS Score: 4.3
  - Description: The BN_GF2m_mod_inv function in crypto/bn/bn_gf2m.c in OpenSSL before 0.9.8s, 1.0.0 before 1.0.0e, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b does not properly handle ECParameters structures in which the curve is over a malformed binary polynomial field, which allows remote attackers to cause a denial of service (infinite loop) via a session that uses an Elliptic Curve algorithm, as demonstrated by an attack against a server that supports client authentication.

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.

- Vulnerability: CVE-2010-4252
  - CVSS Score: 7.5
  - Description: OpenSSL before 1.0.0c, when J-PAKE is enabled, does not properly validate the public parameters in the J-PAKE protocol, which allows remote attackers to bypass the need for knowledge of the shared secret, and successfully authenticate, by sending crafted values in each round of the protocol.

- Vulnerability: CVE-2014-8176
  - CVSS Score: 7.5
  - Description: The dtls1_clear_queues function in ssl/d1_lib.c in OpenSSL before 0.9.8za, 1.0.0 before 1.0.0m, and 1.0.1 before 1.0.1h frees data structures without considering that application data can arrive between a ChangeCipherSpec message and a Finished message, which allows remote DTLS peers to cause a denial of service (memory corruption and application crash) or possibly have unspecified other impact via unexpected application data.

- Vulnerability: CVE-2010-4180
  - CVSS Score: 4.3
  - Description: OpenSSL before 0.9.8q, and 1.0.x before 1.0.0c, when SSL_OP_NETSCAPE_REUSE_CIPHER_CHANGE_BUG is enabled, does not properly prevent modification of the ciphersuite in the session cache, which allows remote attackers to force the downgrade to an unintended cipher via vectors involving sniffing network traffic to discover a session identifier.

- Vulnerability: CVE-2011-4969
  - CVSS Score: 4.3

  - Description: Cross-site scripting (XSS) vulnerability in jQuery before 1.6.3, when using location.hash to select elements, allows remote attackers to inject arbitrary web script or HTML via a crafted tag.

- Vulnerability: CVE-2016-2176
  - CVSS Score: 6.4
  - Description: The X509_NAME_oneline function in crypto/x509/x509_obj.c in OpenSSL before 1.0.1t and 1.0.2 before 1.0.2h allows remote attackers to obtain sensitive information from process stack memory or cause a denial of service (buffer over-read) via crafted EBCDIC ASN.1 data.
- Vulnerability: CVE-2014-3505
  - CVSS Score: 5
  - Description: Double free vulnerability in d1_both.c in the DTLS implementation in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1i allows remote attackers to cause a denial of service (application crash) via crafted DTLS packets that trigger an error condition.
- Vulnerability: CVE-2014-3506
  - CVSS Score: 5
  - Description: d1_both.c in the DTLS implementation in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1i allows remote attackers to cause a denial of service (memory consumption) via crafted DTLS handshake messages that trigger memory allocations corresponding to large length values.
- Vulnerability: CVE-2014-3507
  - CVSS Score: 5
  - Description: Memory leak in d1_both.c in the DTLS implementation in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1i allows remote attackers to cause a denial of service (memory consumption) via zero-length DTLS fragments that trigger improper handling of the return value of a certain insert function.
- Vulnerability: CVE-2014-3566
  - CVSS Score: 4.3
  - Description: The SSL protocol 3.0, as used in OpenSSL through 1.0.1i and other products, uses nondeterministic CBC padding, which makes it easier for man-in-the-middle attackers to obtain cleartext data via a padding-oracle attack, aka the "POODLE" issue.
- Vulnerability: CVE-2014-3567
  - CVSS Score: 7.1
  - Description: Memory leak in the tls_decrypt_ticket function in t1_lib.c in OpenSSL before 0.9.8zc, 1.0.0 before 1.0.0o, and 1.0.1 before 1.0.1j allows remote attackers to cause a denial of service (memory consumption) via a crafted session ticket that triggers an integrity-check failure.
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.

- Vulnerability: CVE-2013-6450
  - CVSS Score: 5.8
  - Description: The DTLS retransmission implementation in OpenSSL 1.0.0 before 1.0.0l and 1.0.1 before 1.0.1f does not properly maintain data structures for digest and encryption contexts, which might allow man-in-the-middle attackers to trigger the use of a different context and cause a denial of service (application crash) by interfering with packet delivery, related to ssl/d1_both.c and ssl/t1_enc.c.
- Vulnerability: CVE-2010-3864
  - CVSS Score: 7.6
  - Description: Multiple race conditions in ssl/t1_lib.c in OpenSSL 0.9.8f through 0.9.8o, 1.0.0, and 1.0.0a, when multi-threading and internal caching are enabled on a TLS server, might allow remote attackers to execute arbitrary code via client data that triggers a heap-based buffer overflow, related to (1) the TLS server name extension and (2) elliptic curve cryptography.
- Vulnerability: CVE-2014-3568
  - CVSS Score: 4.3
  - Description: OpenSSL before 0.9.8zc, 1.0.0 before 1.0.0o, and 1.0.1 before 1.0.1j does not properly enforce the no-ssl3 build option, which allows remote attackers to bypass intended access restrictions via an SSL 3.0 handshake, related to s23_clnt.c and s23_srvr.c.
- Vulnerability: CVE-2011-3207
  - CVSS Score: 5
  - Description: crypto/x509/x509_vfy.c in OpenSSL 1.0.x before 1.0.0e does not initialize certain structure members, which makes it easier for remote attackers to bypass CRL validation by using a nextUpdate value corresponding to a time in the past.
- Vulnerability: CVE-2014-3508
  - CVSS Score: 4.3
  - Description: The OBJ_obj2txt function in crypto/objects/obj_dat.c in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1i, when pretty printing is used, does not ensure the presence of '\{}0' characters, which allows context-dependent attackers to obtain sensitive information from process stack memory by reading output from X509_name_oneline, X509_name_print_ex, and unspecified other functions.
- Vulnerability: CVE-2014-3509
  - CVSS Score: 6.8
  - Description: Race condition in the ssl_parse_serverhello_tlsext function in t1_lib.c in OpenSSL 1.0.0 before 1.0.0n and 1.0.1 before 1.0.1i, when multithreading and session resumption are used, allows remote SSL servers to cause a denial of service (memory overwrite and client application crash) or possibly have unspecified other impact by sending Elliptic Curve (EC) Supported Point Formats Extension data.
- Vulnerability: CVE-2015-3195
  - CVSS Score: 5

  - Description: The ASN1_TFLG_COMBINE implementation in crypto/asn1/tasn_dec.c in OpenSSL before 0.9.8zh, 1.0.0 before 1.0.0t, 1.0.1 before 1.0.1q, and 1.0.2 before 1.0.2e mishandles errors caused by malformed X509_ATTRIBUTE data, which allows remote attackers to obtain sensitive information from process memory by triggering a decoding failure in a PKCS#7 or CMS application.

- Vulnerability: CVE-2015-0292
  - CVSS Score: 7.5
  - Description: Integer underflow in the EVP_DecodeUpdate function in crypto/evp/encode.c in the base64-decoding implementation in OpenSSL before 0.9.8za, 1.0.0 before 1.0.0m, and 1.0.1 before 1.0.1h allows remote attackers to cause a denial of service (memory corruption) or possibly have unspecified other impact via crafted base64 data that triggers a buffer overflow.
- Vulnerability: CVE-2015-0293
  - CVSS Score: 5
  - Description: The SSLv2 implementation in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a allows remote attackers to cause a denial of service (s2_lib.c assertion failure and daemon exit) via a crafted CLIENT-MASTER-KEY message.
- Vulnerability: CVE-2011-4108
  - CVSS Score: 4.3
  - Description: The DTLS implementation in OpenSSL before 0.9.8s and 1.x before 1.0.0f performs a MAC check only if certain padding is valid, which makes it easier for remote attackers to recover plaintext via a padding oracle attack.
- Vulnerability: CVE-2012-1165
  - CVSS Score: 5
  - Description: The mime_param_cmp function in crypto/asn1/asn_mime.c in OpenSSL before 0.9.8u and 1.x before 1.0.0h allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a crafted S/MIME message, a different vulnerability than CVE-2006-7250.
- Vulnerability: CVE-2011-0014
  - CVSS Score: 5
  - Description: ssl/t1_lib.c in OpenSSL 0.9.8h through 0.9.8q and 1.0.0 through 1.0.0c allows remote attackers to cause a denial of service (crash), and possibly obtain sensitive information in applications that use OpenSSL, via a malformed ClientHello handshake message that triggers an out-of-bounds memory access, aka "OCSP stapling vulnerability."
- Vulnerability: CVE-2020-7656
  - CVSS Score: 4.3
  - Description: jquery prior to 1.9.0 allows Cross-site Scripting attacks via the load method. The load method fails to recognize and remove "<script>" HTML tags that contain a whitespace character, i.e: "</script >", which results in the enclosed script logic to be executed.
- Vulnerability: CVE-2014-3510
  - CVSS Score: 4.3

  - Description: The ssl3_send_client_key_exchange function in s3_clnt.c in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1i allows remote DTLS servers to cause a denial of service (NULL pointer dereference and client application crash) via a crafted handshake message in conjunction with a (1) anonymous DH or (2) anonymous ECDH ciphersuite.

- Vulnerability: CVE-2015-9251
  - CVSS Score: 4.3
  - Description: jQuery before 3.0.0 is vulnerable to Cross-site Scripting (XSS) attacks when a cross-domain Ajax request is performed without the dataType option, causing text/javascript responses to be executed.

- Vulnerability: CVE-2011-4619
  - CVSS Score: 5
  - Description: The Server Gated Cryptography (SGC) implementation in OpenSSL before 0.9.8s and 1.x before 1.0.0f does not properly handle handshake restarts, which allows remote attackers to cause a denial of service (CPU consumption) via unspecified vectors.

- Vulnerability: CVE-2020-11022
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.2 and before 3.5.0, passing HTML from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.

- Vulnerability: CVE-2020-11023
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.0.3 and before 3.5.0, passing HTML containing <option> elements from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.

- Vulnerability: CVE-2010-5298
  - CVSS Score: 4
  - Description: Race condition in the ssl3_read_bytes function in s3_pkt.c in OpenSSL through 1.0.1g, when SSL_MODE_RELEASE_BUFFERS is enabled, allows remote attackers to inject data across sessions or cause a denial of service (use-after-free and parsing error) via an SSL connection in a multithreaded environment.

- Vulnerability: CVE-2014-0221
  - CVSS Score: 4.3
  - Description: The dtls1_get_message_fragment function in d1_both.c in OpenSSL before 0.9.8za, 1.0.0 before 1.0.0m, and 1.0.1 before 1.0.1h allows remote attackers to cause a denial of service (recursion and client crash) via a DTLS hello message in an invalid DTLS handshake.

- Vulnerability: CVE-2011-3210
  - CVSS Score: 5

  - Description: The ephemeral ECDH ciphersuite functionality in OpenSSL 0.9.8 through 0.9.8r and 1.0.x before 1.0.0e does not ensure thread safety during processing of handshake messages from clients, which allows remote attackers to cause a denial of service (daemon crash) via out-of-order messages that violate the TLS protocol.

- Vulnerability: CVE-2012-6708
  - CVSS Score: 4.3
  - Description: jQuery before 1.9.0 is vulnerable to Cross-site Scripting (XSS) attacks. The jQuery(strInput) function does not differentiate selectors from HTML in a reliable fashion. In vulnerable versions, jQuery determined whether the input was HTML by looking for the '<' character anywhere in the string, giving attackers more flexibility when attempting to construct a malicious payload. In fixed versions, jQuery only deems the input to be HTML if it explicitly starts with the '<' character, limiting exploitability only to attackers who can control the beginning of a string, which is far less common.

- Vulnerability: CVE-2010-0742
  - CVSS Score: 7.5
  - Description: The Cryptographic Message Syntax (CMS) implementation in crypto/cms/cms_asn1.c in OpenSSL before 0.9.8o and 1.x before 1.0.0a does not properly handle structures that contain OriginatorInfo, which allows context-dependent attackers to modify invalid memory locations or conduct double-free attacks, and possibly execute arbitrary code, via unspecified vectors.

- Vulnerability: CVE-2010-1633
  - CVSS Score: 6.4
  - Description: RSA verification recovery in the EVP_PKEY_verify_recover function in OpenSSL 1.x before 1.0.0a, as used by pkeyutl and possibly other applications, returns uninitialized memory upon failure, which might allow context-dependent attackers to bypass intended key requirements or obtain sensitive information via unspecified vectors. NOTE: some of these details are obtained from third party information.

- Vulnerability: CVE-2015-0209
  - CVSS Score: 6.8
  - Description: Use-after-free vulnerability in the d2i_ECPrivateKey function in crypto/ec/ec_asn1.c in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a might allow remote attackers to cause a denial of service (memory corruption and application crash) or possibly have unspecified other impact via a malformed Elliptic Curve (EC) private-key file that is improperly handled during import.

- Vulnerability: CVE-2013-0166
  - CVSS Score: 5
  - Description: OpenSSL before 0.9.8y, 1.0.0 before 1.0.0k, and 1.0.1 before 1.0.1d does not properly perform signature verification for OCSP responses, which allows remote OCSP servers to cause a denial of service (NULL pointer dereference and application crash) via an invalid key.

- Vulnerability: CVE-2016-0703
  - CVSS Score: 4.3

  - Description: The get_client_master_key function in s2_srvr.c in the SSLv2 implementation in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a accepts a nonzero CLIENT-MASTER-KEY CLEAR-KEY-LENGTH value for an arbitrary cipher, which allows man-in-the-middle attackers to determine the MASTER-KEY value and decrypt TLS ciphertext data by leveraging a Bleichenbacher RSA padding oracle, a related issue to CVE-2016-0800.

- Vulnerability: CVE-2015-1790
  - CVSS Score: 5
  - Description: The PKCS7_dataDecodefunction in crypto/pkcs7/pk7_doit.c in OpenSSL before 0.9.8zg, 1.0.0 before 1.0.0s, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a PKCS#7 blob that uses ASN.1 encoding and lacks inner EncryptedContent data.

- Vulnerability: CVE-2016-0704
  - CVSS Score: 4.3
  - Description: An oracle protection mechanism in the get_client_master_key function in s2_srvr.c in the SSLv2 implementation in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a overwrites incorrect MASTER-KEY bytes during use of export cipher suites, which makes it easier for remote attackers to decrypt TLS ciphertext data by leveraging a Bleichenbacher RSA padding oracle, a related issue to CVE-2016-0800.

- Vulnerability: CVE-2015-1792
  - CVSS Score: 5
  - Description: The do_free_upto function in crypto/cms/cms_smime.c in OpenSSL before 0.9.8zg, 1.0.0 before 1.0.0s, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b allows remote attackers to cause a denial of service (infinite loop) via vectors that trigger a NULL value of a BIO data structure, as demonstrated by an unrecognized X.660 OID for a hash function.

- Vulnerability: CVE-2021-4044
  - CVSS Score: 5
  - Description: Internally libssl in OpenSSL calls X509_verify_cert() on the client side to verify a certificate supplied by a server. That function may return a negative return value to indicate an internal error (for example out of memory). Such a negative return value is mishandled by OpenSSL and will cause an IO function (such as SSL_connect() or SSL_do_handshake()) to not indicate success and a subsequent call to SSL_get_error() to return the value SSL_ERROR_WANT_RETRY_VERIFY. This return value is only supposed to be returned by OpenSSL if the application has previously called SSL_CTX_set_cert_verify_callback(). Since most applications do not do this the SSL_ERROR_WANT_RETRY_VERIFY return value from SSL_get_error() will be totally unexpected and applications may not behave correctly as a result. The exact behaviour will depend on the application but it could result in crashes, infinite loops or other similar incorrect responses. This issue is made more serious in combination with a separate bug in OpenSSL 3.0 that will cause X509_verify_cert() to indicate an internal error when processing a certificate chain. This will occur where a certificate does not include the Subject Alternative Name extension but where a Certificate Authority has enforced name constraints. This issue can occur even with valid chains. By combining the two issues an attacker could induce incorrect, application dependent behaviour. Fixed in OpenSSL 3.0.1 (Affected 3.0.0).

- Vulnerability: CVE-2014-0224
  - CVSS Score: 5.8
  - Description: OpenSSL before 0.9.8za, 1.0.0 before 1.0.0m, and 1.0.1 before 1.0.1h does not properly restrict processing of ChangeCipherSpec messages, which allows man-in-the-middle attackers to trigger use of a zero-length master key in certain OpenSSL-to-OpenSSL communications, and consequently hijack sessions or obtain sensitive information, via a crafted TLS handshake, aka the "CCS Injection" vulnerability.
- Vulnerability: CVE-2012-2110
  - CVSS Score: 7.5
  - Description: The asn1_d2i_read_bio function in crypto/asn1/a_d2i_fp.c in OpenSSL before 0.9.8v, 1.0.0 before 1.0.0i, and 1.0.1 before 1.0.1a does not properly interpret integer data, which allows remote attackers to conduct buffer overflow attacks, and cause a denial of service (memory corruption) or possibly have unspecified other impact, via crafted DER data, as demonstrated by an X.509 certificate or an RSA public key.
- Vulnerability: CVE-2013-0169
  - CVSS Score: 2.6
  - Description: The TLS protocol 1.1 and 1.2 and the DTLS protocol 1.0 and 1.2, as used in OpenSSL, OpenJDK, PolarSSL, and other products, do not properly consider timing side-channel attacks on a MAC check requirement during the processing of malformed CBC padding, which allows remote attackers to conduct distinguishing attacks and plaintext-recovery attacks via statistical analysis of timing data for crafted packets, aka the "Lucky Thirteen" issue.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2012-0884
  - CVSS Score: 5
  - Description: The implementation of Cryptographic Message Syntax (CMS) and PKCS #7 in OpenSSL before 0.9.8u and 1.x before 1.0.0h does not properly restrict certain oracle behavior, which makes it easier for context-dependent attackers to decrypt data via a Million Message Attack (MMA) adaptive chosen ciphertext attack.
- Vulnerability: CVE-2015-4000
  - CVSS Score: 4.3
  - Description: The TLS protocol 1.2 and earlier, when a DHE_EXPORT ciphersuite is enabled on a server but not on a client, does not properly convey a DHE_EXPORT choice, which allows man-in-the-middle attackers to conduct cipher-downgrade attacks by rewriting a ClientHello with DHE replaced by DHE_EXPORT and then rewriting a ServerHello with DHE_EXPORT replaced by DHE, aka the "Logjam" issue.
- Vulnerability: CVE-2014-0198

  - CVSS Score: 4.3
  - Description: The do_ssl3_write function in s3_pkt.c in OpenSSL 1.x through 1.0.1g, when SSL_MODE_RELEASE_BUFFERS is enabled, does not properly manage a buffer pointer during certain recursive calls, which allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via vectors that trigger an alert condition.

- Vulnerability: CVE-2016-2109
  - CVSS Score: 7.8
  - Description: The asn1_d2i_read_bio function in crypto/asn1/a_d2i_fp.c in the ASN.1 BIO implementation in OpenSSL before 1.0.1t and 1.0.2 before 1.0.2h allows remote attackers to cause a denial of service (memory consumption) via a short invalid encoding.

- Vulnerability: CVE-2016-2108
  - CVSS Score: 10
  - Description: The ASN.1 implementation in OpenSSL before 1.0.1o and 1.0.2 before 1.0.2c allows remote attackers to execute arbitrary code or cause a denial of service (buffer underflow and memory corruption) via an ANY field in crafted serialized data, aka the "negative zero" issue.

- Vulnerability: CVE-2013-6449
  - CVSS Score: 4.3
  - Description: The ssl_get_algorithm2 function in ssl/s3_lib.c in OpenSSL before 1.0.2 obtains a certain version number from an incorrect data structure, which allows remote attackers to cause a denial of service (daemon crash) via crafted traffic from a TLS 1.2 client.

- Vulnerability: CVE-2020-7042
  - CVSS Score: 5
  - Description: An issue was discovered in openfortivpn 1.11.0 when used with OpenSSL 1.0.2 or later. tunnel.c mishandles certificate validation because the hostname check operates on uninitialized memory. The outcome is that a valid certificate is never accepted (only a malformed certificate may be accepted).

- Vulnerability: CVE-2020-7043
  - CVSS Score: 6.4
  - Description: An issue was discovered in openfortivpn 1.11.0 when used with OpenSSL before 1.0.2. tunnel.c mishandles certificate validation because hostname comparisons do not consider '\{}0' characters, as demonstrated by a good.example.com\{}x00evil.example.com attack.

- Vulnerability: CVE-2016-2107
  - CVSS Score: 2.6
  - Description: The AES-NI implementation in OpenSSL before 1.0.1t and 1.0.2 before 1.0.2h does not consider memory allocation during a certain padding check, which allows remote attackers to obtain sensitive cleartext information via a padding-oracle attack against an AES CBC session. NOTE: this vulnerability exists because of an incorrect fix for CVE-2013-0169.

- Vulnerability: CVE-2016-2106
  - CVSS Score: 5

  - Description: Integer overflow in the EVP_EncryptUpdate function in crypto/evp/evp_enc.c in OpenSSL before 1.0.1t and 1.0.2 before 1.0.2h allows remote attackers to cause a denial of service (heap memory corruption) via a large amount of data.

- Vulnerability: CVE-2019-11358
  - CVSS Score: 4.3
  - Description: jQuery before 3.4.0, as used in Drupal, Backdrop CMS, and other products, mishandles jQuery.extend(true, {}, ...) because of Object.prototype pollution. If an unsanitized source object contained an enumerable __proto__ property, it could extend the native Object.prototype.

- Vulnerability: CVE-2014-0195
  - CVSS Score: 6.8
  - Description: The dtls1_reassemble_fragment function in d1_both.c in OpenSSL before 0.9.8za, 1.0.0 before 1.0.0m, and 1.0.1 before 1.0.1h does not properly validate fragment lengths in DTLS ClientHello messages, which allows remote attackers to execute arbitrary code or cause a denial of service (buffer overflow and application crash) via a long non-initial fragment.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-1379
  - CVSS Score: 5
  - Description: Use-after-free vulnerability in the dtls1_retrieve_buffered_fragment function in ssl/d1_both.c in OpenSSL 1.0.0 Beta 2 allows remote attackers to cause a denial of service (openssl s_client crash) and possibly have unspecified other impact via a DTLS packet, as demonstrated by a packet from a server that uses a crafted server certificate.

- Vulnerability: CVE-2015-0287
  - CVSS Score: 5
  - Description: The ASN1_item_ex_d2i function in crypto/asn1/tasn_dec.c in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a does not reinitialize CHOICE and ADB data structures, which might allow attackers to cause a denial of service (invalid write operation and memory corruption) by leveraging an application that relies on ASN.1 structure reuse.

- Vulnerability: CVE-2015-0286
  - CVSS Score: 5
  - Description: The ASN1_TYPE_cmp function in crypto/asn1/a_type.c in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a does not properly perform boolean-type comparisons, which allows remote attackers to cause a denial of service (invalid read operation and application crash) via a crafted X.509 certificate to an endpoint that uses the certificate-verification feature.

- Vulnerability: CVE-2015-0289
  - CVSS Score: 5
  - Description: The PKCS#7 implementation in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a does not properly handle a lack of outer ContentInfo, which allows attackers to cause a denial of service (NULL pointer dereference and application crash) by leveraging an application that processes arbitrary PKCS#7 data and providing malformed data with ASN.1 encoding, related to crypto/pkcs7/pk7_doit.c and crypto/pkcs7/pk7_lib.c.
- Vulnerability: CVE-2015-0288
  - CVSS Score: 5
  - Description: The X509_to_X509_REQ function in crypto/x509/x509_req.c in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a might allow attackers to cause a denial of service (NULL pointer dereference and application crash) via an invalid certificate key.
- Vulnerability: CVE-2016-7056
  - CVSS Score: 2.1
  - Description: A timing attack flaw was found in OpenSSL 1.0.1u and before that could allow a malicious user with local access to recover ECDSA P-256 private keys.
- Vulnerability: CVE-2014-3512
  - CVSS Score: 7.5
  - Description: Multiple buffer overflows in crypto/srp/srp_lib.c in the SRP implementation in OpenSSL 1.0.1 before 1.0.1i allow remote attackers to cause a denial of service (application crash) or possibly have unspecified other impact via an invalid SRP (1) g, (2) A, or (3) B parameter.
- Vulnerability: CVE-2014-3511
  - CVSS Score: 4.3
  - Description: The ssl23_get_client_hello function in s23_srvr.c in OpenSSL 1.0.1 before 1.0.1i allows man-in-the-middle attackers to force the use of TLS 1.0 by triggering ClientHello message fragmentation in communication between a client and server that both support later TLS versions, related to a "protocol downgrade" issue.
- Vulnerability: CVE-2015-1791
  - CVSS Score: 6.8
  - Description: Race condition in the ssl3_get_new_session_ticket function in ssl/s3_clnt.c in OpenSSL before 0.9.8zg, 1.0.0 before 1.0.0s, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b, when used for a multi-threaded client, allows remote attackers to cause a denial of service (double free and application crash) or possibly have unspecified other impact by providing a NewSessionTicket during an attempt to reuse a ticket that had been obtained earlier.

11.41 IP Address: 159.149.130.129

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 6
- Medium Vulnerabilities: 27
- Low Vulnerabilities: 5
- Total Vulnerabilities: 39

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.7
  - Location:
- Service: N/A
  - Port: 53
  - Version: N/A
  - Location:
- Service: N/A
  - Port: 53
  - Version: N/A
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.57
  - Location: https://dc1.ipa.di.unimi.it/ipa/ui
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.57
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6

  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.

- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.
- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.
- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.
- Vulnerability: CVE-2023-51385

  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.
- Vulnerability: CVE-2024-6387
  - CVSS Score: N/A
  - Description: A security regression (CVE-2006-5051) was discovered in OpenSSH's server (sshd). There is a race condition which can lead sshd to handle some signals in an unsafe manner. An unauthenticated, remote attacker may be able to trigger it by failing to authenticate within a set time period.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2022-3996
  - CVSS Score: N/A
  - Description: If an X.509 certificate contains a malformed policy constraint andpolicy processing is enabled, then a write lock will be taken twicerecursively. On some operating systems (most widely: Windows) thisresults in a denial of service when the affected process hangs. Policyprocessing being enabled on a publicly facing server is not consideredto be a common setup.Policy processing is enabled by passing the '-policy'argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.Update (31 March 2023): The description of the policy processing enablementwas corrected based on CVE-2023-0466.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-4203
  - CVSS Score: N/A
  - Description: A read buffer overrun can be triggered in X.509 certificate verification,specifically in name constraint checking. Note that this occursafter certificate chain signature verification and requires either aCA to have signed the malicious certificate or for the application tocontinue certificate verification despite failure to construct a pathto a trusted issuer.The read buffer overrun might result in a crash which could lead toa denial of service attack. In theory it could also result in the disclosureof private memory contents (such as private keys, or sensitive plaintext)although we are not aware of any working exploit leading to memorycontents disclosure as of the time of release of this advisory.In a TLS client, this can be triggered by connecting to a maliciousserver. In a TLS server, this can be triggered if the server requestsclient authentication and a malicious client connects.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2023-0216
  - CVSS Score: N/A
  - Description: An invalid pointer dereference on read can be triggered when anapplication tries to load malformed PKCS7 data with thed2i_PKCS7(), d2i_PKCS7_bio() or d2i_PKCS7_fp() functions.The result of the dereference is an application crash which couldlead to a denial of service attack. The TLS implementation in OpenSSLdoes not call this function however third party applications mightcall these functions on untrusted data.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2023-0401
  - CVSS Score: N/A

  - Description: A NULL pointer can be dereferenced when signatures are beingverified on PKCS7 signed or signedAndEnveloped data. In case the hashalgorithm used for the signature is known to the OpenSSL library butthe implementation of the hash algorithm is not available the digestinitialization will fail. There is a missing check for the returnvalue from the initialization function which later leads to invalidusage of the digest API most likely leading to a crash.The unavailability of an algorithm can be caused by using FIPSenabled configuration of providers or more commonly by not loadingthe legacy provider.PKCS7 data is processed by the SMIME library calls and also by thetime stamp (TS) library calls. The TLS implementation in OpenSSL doesnot call these functions however third party applications would beaffected if they call these functions to verify signatures on untrusteddata.

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A

  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2023-6129
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications runningon PowerPC CPU based platforms if the CPU provides vector instructions.Impact summary: If an attacker can influence whether the POLY1305 MACalgorithm is used, the application state might be corrupted with variousapplication dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL forPowerPC CPUs restores the contents of vector registers in a different orderthan they are saved. Thus the contents of some of these vector registersare corrupted when returning to the caller. The vulnerable code is used onlyon newer PowerPC processors supporting the PowerISA 2.07 instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However unless the compiler uses the vector registers for storingpointers, the most likely consequence, if any, would be an incorrect resultof some application dependent calculations or a crash leading to a denial ofservice.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3. If this cipher is enabled on the server a maliciousclient can influence whether this AEAD cipher is used. This implies thatTLS server applications using OpenSSL can be potentially impacted. Howeverwe are currently not aware of any concrete application that would be affectedby this issue therefore we consider this a Low severity security issue.

- Vulnerability: CVE-2023-43622
  - CVSS Score: N/A
  - Description: An attacker, opening a HTTP/2 connection with an initial window size of 0, was able to block handling of that connection indefinitely in Apache HTTP Server. This could be used to exhaust worker resources in the server, similar to the well known "slow loris" attack pattern.This has been fixed in version 2.4.58, so that such connection are terminated properly after the configured connection timeout.This issue affects Apache HTTP Server: from 2.4.55 through 2.4.57.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5

  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2023-0217
  - CVSS Score: N/A
  - Description: An invalid pointer dereference on read can be triggered when anapplication tries to check a malformed DSA public key by theEVP_PKEY_public_check() function. This will most likely leadto an application crash. This function can be called on publickeys supplied from untrusted sources which could allow an attackerto cause a denial of service attack.The TLS implementation in OpenSSL does not call this functionbut applications might call the function if there are additionalsecurity requirements imposed by standards such as FIPS 140-3.
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A

  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are consideredrnot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2023-2975
  - CVSS Score: N/A
  - Description: Issue summary: The AES-SIV cipher implementation contains a bug that causesit to ignore empty associated data entries which are unauthenticated asa consequence.Impact summary: Applications that use the AES-SIV algorithm and want toauthenticate empty data entries as associated data can be mislead by removingadding or reordering such empty entries as these are ignored by the OpenSSLimplementation. We are currently unaware of any such applications.The AES-SIV algorithm allows for authentication of multiple associateddata entries along with the encryption. To authenticate empty data theapplication has to call EVP_EncryptUpdate() (or EVP_CipherUpdate()) withNULL pointer as the output buffer and 0 as the input buffer length.The AES-SIV implementation in OpenSSL just returns success for such a callinstead of performing the associated data authentication operation.The empty data thus will not be authenticated.As this issue does not affect non-empty associated data authentication andwe expect it to be rare for an application to use empty associated dataentries this is qualified as Low severity issue.
- Vulnerability: CVE-2023-5363
  - CVSS Score: N/A

  - Description: Issue summary: A bug has been identified in the processing of key andinitialisation vector (IV) lengths. This can lead to potential truncationor overruns during the initialisation of some symmetric ciphers.Impact summary: A truncation in the IV can result in non-uniqueness,which could result in loss of confidentiality for some cipher modes.When calling EVP_EncryptInit_ex2(), EVP_DecryptInit_ex2() orEVP_CipherInit_ex2() the provided OSSL_PARAM array is processed afterthe key and IV have been established. Any alterations to the key length,via the "keylen" parameter or the IV length, via the "ivlen" parameter,within the OSSL_PARAM array will not take effect as intended, potentiallycausing truncation or overreading of these values. The following ciphersand cipher modes are impacted: RC2, RC4, RC5, CCM, GCM and OCB.For the CCM, GCM and OCB cipher modes, truncation of the IV can result inloss of confidentiality. For example, when following NIST's SP 800-38Dsection 8.2.1 guidance for constructing a deterministic IV for AES inGCM mode, truncation of the counter portion could lead to IV reuse.Both truncations and overruns of the key and overruns of the IV willproduce incorrect results and could, in some cases, trigger a memoryexception. However, these issues are not currently assessed as securitycritical.Changing the key and/or IV lengths is not considered to be a common operationand the vulnerable API was recently introduced. Furthermore it is likely thatapplication developers will have spotted this problem during testing sincedecryption would fail unless both peers in the communication were similarlyvulnerable. For these reasons we expect the probability of an application beingvulnerable to this to be quite low. However if an application is vulnerable thenthis issue is considered very serious. For these reasons we have assessed thisissue as Moderate severity overall.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this becausethe issue lies outside of the FIPS provider boundary.OpenSSL 3.1 and 3.0 are vulnerable to this issue.

- Vulnerability: CVE-2023-1255
  - CVSS Score: N/A
  - Description: Issue summary: The AES-XTS cipher decryption implementation for 64 bit ARMplatform contains a bug that could cause it to read past the input buffer,leading to a crash.Impact summary: Applications that use the AES-XTS algorithm on the 64 bit ARMplatform can crash in rare circumstances. The AES-XTS algorithm is usuallyused for disk encryption.The AES-XTS cipher decryption implementation for 64 bit ARM platform will readpast the end of the ciphertext buffer if the ciphertext size is 4 mod 5 in 16byte blocks, e.g. 144 bytes or 1024 bytes. If the memory after the ciphertextbuffer is unmapped, this will trigger a crash which results in a denial ofservice.If an attacker can control the size and location of the ciphertext bufferbeing decrypted by an application using AES-XTS on 64 bit ARM, theapplication is affected. This is fairly unlikely making this issuea Low severity one.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2022-3996
  - CVSS Score: N/A
  - Description: If an X.509 certificate contains a malformed policy constraint andpolicy processing is enabled, then a write lock will be taken twicerecursively. On some operating systems (most widely: Windows) thisresults in a denial of service when the affected process hangs. Policyprocessing being enabled on a publicly facing server is not consideredto be a common setup.Policy processing is enabled by passing the '-policy'argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.Update (31 March 2023): The description of the policy processing enablementwas corrected based on CVE-2023-0466.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-4203
  - CVSS Score: N/A

  - Description: A read buffer overrun can be triggered in X.509 certificate verification,specifically in name constraint checking. Note that this occursafter certificate chain signature verification and requires either aCA to have signed the malicious certificate or for the application tocontinue certificate verification despite failure to construct a pathto a trusted issuer.The read buffer overrun might result in a crash which could lead toa denial of service attack. In theory it could also result in the disclosureof private memory contents (such as private keys, or sensitive plaintext)although we are not aware of any working exploit leading to memorycontents disclosure as of the time of release of this advisory.In a TLS client, this can be triggered by connecting to a maliciousserver. In a TLS server, this can be triggered if the server requestsclient authentication and a malicious client connects.

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2023-0216
  - CVSS Score: N/A
  - Description: An invalid pointer dereference on read can be triggered when anapplication tries to load malformed PKCS7 data with thed2i_PKCS7(), d2i_PKCS7_bio() or d2i_PKCS7_fp() functions.The result of the dereference is an application crash which couldlead to a denial of service attack. The TLS implementation in OpenSSLdoes not call this function however third party applications mightcall these functions on untrusted data.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5

  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe ‘-policy’ argument to the command line utilities or by calling the‘X509_VERIFY_PARAM_set1_policies()’ function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe ‘-policy’ argument to the command line utilities or by calling the‘X509_VERIFY_PARAM_set1_policies()’ function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2023-0401
  - CVSS Score: N/A
  - Description: A NULL pointer can be dereferenced when signatures are beingverified on PKCS7 signed or signedAndEnveloped data. In case the hashalgorithm used for the signature is known to the OpenSSL library butthe implementation of the hash algorithm is not available the digestinitialization will fail. There is a missing check for the returnvalue from the initialization function which later leads to invalidusage of the digest API most likely leading to a crash.The unavailability of an algorithm can be caused by using FIPSenabled configuration of providers or more commonly by not loadingthe legacy provider.PKCS7 data is processed by the SMIME library calls and also by thetime stamp (TS) library calls. The TLS implementation in OpenSSL doesnot call these functions however third party applications would beaffected if they call these functions to verify signatures on untrusteddata.

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A

  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A
  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2023-6129
  - CVSS Score: N/A
  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications runningon PowerPC CPU based platforms if the CPU provides vector instructions.Impact summary: If an attacker can influence whether the POLY1305 MACalgorithm is used, the application state might be corrupted with variousapplication dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL forPowerPC CPUs restores the contents of vector registers in a different orderthan they are saved. Thus the contents of some of these vector registersare corrupted when returning to the caller. The vulnerable code is used onlyon newer PowerPC processors supporting the PowerISA 2.07 instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However unless the compiler uses the vector registers for storingpointers, the most likely consequence, if any, would be an incorrect resultof some application dependent calculations or a crash leading to a denial ofservice.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3. If this cipher is enabled on the server a maliciousclient can influence whether this AEAD cipher is used. This implies thatTLS server applications using OpenSSL can be potentially impacted. Howeverwe are currently not aware of any concrete application that would be affectedby this issue therefore we consider this a Low severity security issue.
- Vulnerability: CVE-2023-43622
  - CVSS Score: N/A
  - Description: An attacker, opening a HTTP/2 connection with an initial window size of 0, was able to block handling of that connection indefinitely in Apache HTTP Server. This could be used to exhaust worker resources in the server, similar to the well known "slow loris" attack pattern.This has been fixed in version 2.4.58, so that such connection are terminated properly after the configured connection timeout.This issue affects Apache HTTP Server: from 2.4.55 through 2.4.57.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2023-0217
  - CVSS Score: N/A

  - Description: An invalid pointer dereference on read can be triggered when anapplication tries to check a malformed DSA public key by theEVP_PKEY_public_check() function. This will most likely leadto an application crash. This function can be called on publickeys supplied from untrusted sources which could allow an attackerto cause a denial of service attack.The TLS implementation in OpenSSL does not call this functionbut applications might call the function if there are additionalsecurity requirements imposed by standards such as FIPS 140-3.

- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-2975
  - CVSS Score: N/A
  - Description: Issue summary: The AES-SIV cipher implementation contains a bug that causesit to ignore empty associated data entries which are unauthenticated asa consequence.Impact summary: Applications that use the AES-SIV algorithm and want toauthenticate empty data entries as associated data can be mislead by removingadding or reordering such empty entries as these are ignored by the OpenSSLimplementation. We are currently unaware of any such applications.The AES-SIV algorithm allows for authentication of multiple associateddata entries along with the encryption. To authenticate empty data theapplication has to call EVP_EncryptUpdate() (or EVP_CipherUpdate()) withNULL pointer as the output buffer and 0 as the input buffer length.The AES-SIV implementation in OpenSSL just returns success for such a callinstead of performing the associated data authentication operation.The empty data thus will not be authenticated.As this issue does not affect non-empty associated data authentication andwe expect it to be rare for an application to use empty associated dataentries this is qualified as Low severity issue.

- Vulnerability: CVE-2023-5363
  - CVSS Score: N/A
  - Description: Issue summary: A bug has been identified in the processing of key andinitialisation vector (IV) lengths. This can lead to potential truncationor overruns during the initialisation of some symmetric ciphers.Impact summary: A truncation in the IV can result in non-uniqueness,which could result in loss of confidentiality for some cipher modes.When calling EVP_EncryptInit_ex2(), EVP_DecryptInit_ex2() orEVP_CipherInit_ex2() the provided OSSL_PARAM array is processed afterthe key and IV have been established. Any alterations to the key length,via the "keylen" parameter or the IV length, via the "ivlen" parameter,within the OSSL_PARAM array will not take effect as intended, potentiallycausing truncation or overreading of these values. The following ciphersand cipher modes are impacted: RC2, RC4, RC5, CCM, GCM and OCB.For the CCM, GCM and OCB cipher modes, truncation of the IV can result inloss of confidentiality. For example, when following NIST's SP 800-38Dsection 8.2.1 guidance for constructing a deterministic IV for AES inGCM mode, truncation of the counter portion could lead to IV reuse.Both truncations and overruns of the key and overruns of the IV willproduce incorrect results and could, in some cases, trigger a memoryexception. However, these issues are not currently assessed as securitycritical.Changing the key and/or IV lengths is not considered to be a common operationand the vulnerable API was recently introduced. Furthermore it is likely thatapplication developers will have spotted this problem during testing sincedecryption would fail unless both peers in the communication were similarlyvulnerable. For these reasons we expect the probability of an application beingvulnerable to this to be quite low. However if an application is vulnerable thenthis issue is considered very serious. For these reasons we have assessed thisissue as Moderate severity overall.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this becausethe issue lies outside of the FIPS provider boundary.OpenSSL 3.1 and 3.0 are vulnerable to this issue.
- Vulnerability: CVE-2023-1255
  - CVSS Score: N/A
  - Description: Issue summary: The AES-XTS cipher decryption implementation for 64 bit ARMplatform contains a bug that could cause it to read past the input buffer,leading to a crash.Impact summary: Applications that use the AES-XTS algorithm on the 64 bit ARMplatform can crash in rare circumstances. The AES-XTS algorithm is usuallyused for disk encryption.The AES-XTS cipher decryption implementation for 64 bit ARM platform will readpast the end of the ciphertext buffer if the ciphertext size is 4 mod 5 in 16byte blocks, e.g. 144 bytes or 1024 bytes. If the memory after the ciphertextbuffer is unmapped, this will trigger a crash which results in a denial ofservice.If an attacker can control the size and location of the ciphertext bufferbeing decrypted by an application using AES-XTS on 64 bit ARM, theapplication is affected. This is fairly unlikely making this issuea Low severity one.

11.42 IP Address: 159.149.44.139

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 0
- Medium Vulnerabilities: 7
- Low Vulnerabilities: 1
- Total Vulnerabilities: 9

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.2
  - Location:
- Service: N/A
  - Port: 554
  - Version: N/A
  - Location:
- Service: nginx
  - Port: 5000
  - Version: N/A
  - Location: /
- Service: nginx
  - Port: 5001
  - Version: N/A
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2020-12062
  - CVSS Score: 5

  - Description: The scp client in OpenSSH 8.2 incorrectly sends duplicate responses to the server upon a utimes system call failure, which allows a malicious unprivileged user on the remote server to overwrite arbitrary files in the client's download directory by creating a crafted subdirectory anywhere on the remote server. The victim must use the command scp -rp to download a file hierarchy containing, anywhere inside, this crafted subdirectory. NOTE: the vendor points out that "this attack can achieve no more than a hostile peer is already able to achieve within the scp protocol" and "utimes does not fail under normal circumstances.

- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6
  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.

- Vulnerability: CVE-2021-28041
  - CVSS Score: 4.6
  - Description: ssh-agent in OpenSSH before 8.5 has a double free that may be relevant in a few less-common scenarios, such as unconstrained agent-socket access on a legacy operating system, or the forwarding of an agent to an attacker-controlled host.

- Vulnerability: CVE-2020-14145
  - CVSS Score: 4.3
  - Description: The client side in OpenSSH 5.7 through 8.4 has an Observable Discrepancy leading to an information leak in the algorithm negotiation. This allows man-in-the-middle attackers to target initial connection attempts (where no host key for the server has been cached by the client). NOTE: some reports state that 8.5 and 8.6 are also affected.

- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.

- Vulnerability: CVE-2020-15778
  - CVSS Score: 6.8
  - Description: scp in OpenSSH through 8.3p1 allows command injection in the scp.c toremote function, as demonstrated by backtick characters in the destination argument. NOTE: the vendor reportedly has stated that they intentionally omit validation of "anomalous argument transfers" because that could "stand a great chance of breaking existing workflows."

- Vulnerability: CVE-2023-48795

  - CVSS Score: N/A
  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.

- Vulnerability: CVE-2023-51385
  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.
- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.

11.43 IP Address: 159.149.47.225

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: nginx
  - Port: 80
  - Version: N/A
  - Location: https://159.149.47.225/
- Service: NoMachine NX Server remote desktop
  - Port: 4000
  - Version: 6.18.1
  - Location:

No vulnerabilities found for this IP address.

11.44 IP Address: 159.149.116.203

- Organization: UNI-Milano
- Operating System: Windows
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: Microsoft IIS httpd
  - Port: 80
  - Version: 10.0
  - Location: /

No vulnerabilities found for this IP address.

11.45 IP Address: 104.18.36.224

- Organization: Cloudflare, Inc.
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 80
  - Version: N/A
  - Location: https://ssl1.prod.s1search.co/
- Service: N/A
  - Port: 8880
  - Version: N/A
  - Location:

No vulnerabilities found for this IP address.

11.46 IP Address: 159.149.30.3

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 11
- Medium Vulnerabilities: 47
- Low Vulnerabilities: 4
- Total Vulnerabilities: 62

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.29
  - Location: http://www.matematica.unimi.it

Vulnerabilities Found

- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.

- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-1333
  - CVSS Score: 5

  - Description: By specially crafting HTTP/2 requests, workers would be allocated 60 seconds longer than necessary, leading to worker exhaustion and a denial of service. Fixed in Apache HTTP Server 2.4.34 (Affected 2.4.18-2.4.30,2.4.33).

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2018-11763
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.17 to 2.4.34, by sending continuous, large SETTINGS frames a client can occupy a connection, server thread and CPU time without any connection timeout coming to effect. This affects only HTTP/2 connections. A possible mitigation is to not enable the h2 protocol.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A

  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.
- Vulnerability: CVE-2022-22721

  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.
- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690

  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A

  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8

  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

11.47 IP Address: 159.149.47.56

- Organization: UNI-Milano
- Operating System: Linux
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 4
- Low Vulnerabilities: 0
- Total Vulnerabilities: 4

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.4p1 Debian 5+deb11u3
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2023-44487
  - CVSS Score: N/A
  - Description: The HTTP/2 protocol allows a denial of service (server resource consumption) because request cancellation can reset many streams quickly, as exploited in the wild in August through October 2023.
- Vulnerability: CVE-2021-23017
  - CVSS Score: 6.8
  - Description: A security issue in nginx resolver was identified, which might allow an attacker who is able to forge UDP packets from the DNS server to cause 1-byte memory overwrite, resulting in worker process crash or potential other impact.
- Vulnerability: CVE-2021-3618
  - CVSS Score: 5.8
  - Description: ALPACA is an application layer protocol content confusion attack, exploiting TLS servers implementing different protocols but using compatible certificates, such as multi-domain or wildcard certificates. A MiTM attacker having access to victim's traffic at the TCP/IP layer can redirect traffic from one subdomain to another, resulting in a valid TLS session. This breaks the authentication of TLS and cross-protocol attacks may be possible where the behavior of one protocol service may compromise the other at the application layer.
- Vulnerability: CVE-2023-44487
  - CVSS Score: N/A
  - Description: The HTTP/2 protocol allows a denial of service (server resource consumption) because request cancellation can reset many streams quickly, as exploited in the wild in August through October 2023.
- Vulnerability: CVE-2021-23017
  - CVSS Score: 6.8

  - Description: A security issue in nginx resolver was identified, which might allow an attacker who is able to forge UDP packets from the DNS server to cause 1-byte memory overwrite, resulting in worker process crash or potential other impact.

- Vulnerability: CVE-2021-3618
  - CVSS Score: 5.8
  - Description: ALPACA is an application layer protocol content confusion attack, exploiting TLS servers implementing different protocols but using compatible certificates, such as multi-domain or wildcard certificates. A MiTM attacker having access to victim's traffic at the TCP/IP layer can redirect traffic from one subdomain to another, resulting in a valid TLS session. This breaks the authentication of TLS and cross-protocol attacks may be possible where the behavior of one protocol service may compromise the other at the application layer.

11.48 IP Address: 159.149.145.56

- Organization: UNI-Milano
- Operating System: Synology DiskStation Manager (DSM) 6.2.4-25556
- Critical Vulnerabilities: 1
- High Vulnerabilities: 0
- Medium Vulnerabilities: 11
- Low Vulnerabilities: 2
- Total Vulnerabilities: 14

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 7.4
  - Location:
- Service: nginx
  - Port: 80
  - Version: N/A
  - Location: http://159.149.145.56:5000/
- Service: nginx
  - Port: 443
  - Version: N/A
  - Location: https://159.149.145.56:5001/
- Service: nginx
  - Port: 5000
  - Version: N/A
  - Location: https://159.149.145.56:5001/
- Service: nginx
  - Port: 5001
  - Version: N/A
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.

- Vulnerability: CVE-2019-6110
  - CVSS Score: 4
  - Description: In OpenSSH 7.9, due to accepting and displaying arbitrary stderr output from the server, a malicious server (or Man-in-The-Middle attacker) can manipulate the client output, for example to use ANSI control codes to hide additional files being transferred.
- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2018-15919
  - CVSS Score: 5
  - Description: Remotely observable behaviour in auth-gss2.c in OpenSSH through 7.8 could be used by remote attackers to detect existence of users on a target system when GSS2 is in use. NOTE: the discoverer states 'We understand that the OpenSSH developers do not want to treat such a username enumeration (or "oracle") as a vulnerability.'
- Vulnerability: CVE-2018-15473
  - CVSS Score: 5
  - Description: OpenSSH through 7.7 is prone to a user enumeration vulnerability due to not delaying bailout for an invalid authenticating user until after the packet containing the request has been fully parsed, related to auth2-gss.c, auth2-hostbased.c, and auth2-pubkey.c.
- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6
  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.
- Vulnerability: CVE-2017-15906
  - CVSS Score: 5
  - Description: The process_open function in sftp-server.c in OpenSSH before 7.6 does not properly prevent write operations in readonly mode, which allows attackers to create zero-length files.
- Vulnerability: CVE-2018-20685
  - CVSS Score: 2.6
  - Description: In OpenSSH 7.9, scp.c in the scp client allows remote SSH servers to bypass intended access restrictions via the filename of . or an empty filename. The impact is modifying the permissions of the target directory on the client side.

- Vulnerability: CVE-2020-14145
  - CVSS Score: 4.3
  - Description: The client side in OpenSSH 5.7 through 8.4 has an Observable Discrepancy leading to an information leak in the algorithm negotiation. This allows man-in-the-middle attackers to target initial connection attempts (where no host key for the server has been cached by the client). NOTE: some reports state that 8.5 and 8.6 are also affected.
- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.
- Vulnerability: CVE-2020-15778
  - CVSS Score: 6.8
  - Description: scp in OpenSSH through 8.3p1 allows command injection in the scp.c toremote function, as demonstrated by backtick characters in the destination argument. NOTE: the vendor reportedly has stated that they intentionally omit validation of "anomalous argument transfers" because that could "stand a great chance of breaking existing workflows."
- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.
- Vulnerability: CVE-2019-6111

  - CVSS Score: 5.8
  - Description: An issue was discovered in OpenSSH 7.9. Due to the scp implementation being derived from 1983 rcp, the server chooses which files/directories are sent to the client. However, the scp client only performs cursory validation of the object name returned (only directory traversal attacks are prevented). A malicious scp server (or Man-in-The-Middle attacker) can overwrite arbitrary files in the scp client target directory. If recursive operation (-r) is performed, the server can manipulate subdirectories as well (for example, to overwrite the .ssh/authorized_keys file).

- Vulnerability: CVE-2023-51385
  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.
- Vulnerability: CVE-2019-6109
  - CVSS Score: 4
  - Description: An issue was discovered in OpenSSH 7.9. Due to missing character encoding in the progress display, a malicious server (or Man-in-The-Middle attacker) can employ crafted object names to manipulate the client output, e.g., by using ANSI control codes to hide additional files being transferred. This affects refresh_progress_meter() in progressmeter.c.

11.49 IP Address: 159.149.129.169

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.2p1 Ubuntu-4ubuntu0.11
  - Location:
- Service: OpenSSH
  - Port: 2222
  - Version: 8.2p1 Ubuntu-4ubuntu0.11
  - Location:

No vulnerabilities found for this IP address.

11.50 IP Address: 159.149.105.12

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 22
- Medium Vulnerabilities: 164
- Low Vulnerabilities: 16
- Total Vulnerabilities: 206

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.6
  - Location: https://sumo.divtlc.unimi.it/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.6
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3

  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using 'OIDCPreservePost On'.
- Vulnerability: CVE-2024-38476

  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5

  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167

  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.51 IP Address: 159.149.10.103

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: http://contacts.unimi.it/dav/principals/

No vulnerabilities found for this IP address.

11.52 IP Address: 159.149.105.179

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: N/A
  - Location: https://webauth.divtlc.unimi.it/
- Service: Apache httpd
  - Port: 443
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.53 IP Address: 159.149.133.42

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 22
- Medium Vulnerabilities: 94
- Low Vulnerabilities: 8
- Total Vulnerabilities: 124

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 7.6p1 Ubuntu 4ubuntu0.5
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.29
  - Location: https://gvm.aislab.di.unimi.it/

Vulnerabilities Found

- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-1333
  - CVSS Score: 5
  - Description: By specially crafting HTTP/2 requests, workers would be allocated 60 seconds longer than necessary, leading to worker exhaustion and a denial of service. Fixed in Apache HTTP Server 2.4.34 (Affected 2.4.18-2.4.30,2.4.33).
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2018-11763
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.17 to 2.4.34, by sending continuous, large SETTINGS frames a client can occupy a connection, server thread and CPU time without any connection timeout coming to effect. This affects only HTTP/2 connections. A possible mitigation is to not enable the h2 protocol.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122

  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.

- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.

- Vulnerability: CVE-2022-22721

  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.
- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690

  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A

  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8

  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-1333
  - CVSS Score: 5
  - Description: By specially crafting HTTP/2 requests, workers would be allocated 60 seconds longer than necessary, leading to worker exhaustion and a denial of service. Fixed in Apache HTTP Server 2.4.34 (Affected 2.4.18-2.4.30,2.4.33).
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2018-11763
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.17 to 2.4.34, by sending continuous, large SETTINGS frames a client can occupy a connection, server thread and CPU time without any connection timeout coming to effect. This affects only HTTP/2 connections. A possible mitigation is to not enable the h2 protocol.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

11.54 IP Address: 159.149.45.25

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 5
- High Vulnerabilities: 23
- Medium Vulnerabilities: 176
- Low Vulnerabilities: 18
- Total Vulnerabilities: 222

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 7.4
  - Location:
- Service: Sendmail
  - Port: 25
  - Version: 8.14.7/8.14.7
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.6
  - Location: https://calcolo.fisica.unimi.it/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.6
  - Location: /
- Service: MariaDB
  - Port: 3306
  - Version: N/A
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.

- Vulnerability: CVE-2019-6110
  - CVSS Score: 4
  - Description: In OpenSSH 7.9, due to accepting and displaying arbitrary stderr output from the server, a malicious server (or Man-in-The-Middle attacker) can manipulate the client output, for example to use ANSI control codes to hide additional files being transferred.
- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2018-15919
  - CVSS Score: 5
  - Description: Remotely observable behaviour in auth-gss2.c in OpenSSH through 7.8 could be used by remote attackers to detect existence of users on a target system when GSS2 is in use. NOTE: the discoverer states 'We understand that the OpenSSH developers do not want to treat such a username enumeration (or "oracle") as a vulnerability.'
- Vulnerability: CVE-2018-15473
  - CVSS Score: 5
  - Description: OpenSSH through 7.7 is prone to a user enumeration vulnerability due to not delaying bailout for an invalid authenticating user until after the packet containing the request has been fully parsed, related to auth2-gss.c, auth2-hostbased.c, and auth2-pubkey.c.
- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6
  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.
- Vulnerability: CVE-2017-15906
  - CVSS Score: 5
  - Description: The process_open function in sftp-server.c in OpenSSH before 7.6 does not properly prevent write operations in readonly mode, which allows attackers to create zero-length files.
- Vulnerability: CVE-2018-20685
  - CVSS Score: 2.6
  - Description: In OpenSSH 7.9, scp.c in the scp client allows remote SSH servers to bypass intended access restrictions via the filename of . or an empty filename. The impact is modifying the permissions of the target directory on the client side.

- Vulnerability: CVE-2020-14145
  - CVSS Score: 4.3
  - Description: The client side in OpenSSH 5.7 through 8.4 has an Observable Discrepancy leading to an information leak in the algorithm negotiation. This allows man-in-the-middle attackers to target initial connection attempts (where no host key for the server has been cached by the client). NOTE: some reports state that 8.5 and 8.6 are also affected.
- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.
- Vulnerability: CVE-2020-15778
  - CVSS Score: 6.8
  - Description: scp in OpenSSH through 8.3p1 allows command injection in the scp.c toremote function, as demonstrated by backtick characters in the destination argument. NOTE: the vendor reportedly has stated that they intentionally omit validation of "anomalous argument transfers" because that could "stand a great chance of breaking existing workflows."
- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.
- Vulnerability: CVE-2019-6111

  - CVSS Score: 5.8
  - Description: An issue was discovered in OpenSSH 7.9. Due to the scp implementation being derived from 1983 rcp, the server chooses which files/directories are sent to the client. However, the scp client only performs cursory validation of the object name returned (only directory traversal attacks are prevented). A malicious scp server (or Man-in-The-Middle attacker) can overwrite arbitrary files in the scp client target directory. If recursive operation (-r) is performed, the server can manipulate subdirectories as well (for example, to overwrite the .ssh/authorized_keys file).

- Vulnerability: CVE-2023-51385
  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.
- Vulnerability: CVE-2019-6109
  - CVSS Score: 4
  - Description: An issue was discovered in OpenSSH 7.9. Due to missing character encoding in the progress display, a malicious server (or Man-in-The-Middle attacker) can employ crafted object names to manipulate the client output, e.g., by using ANSI control codes to hide additional files being transferred. This affects refresh_progress_meter() in progressmeter.c.
- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3

  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2024-4577
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using 'OIDCPreservePost On'.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2023-3247
  - CVSS Score: N/A
  - Description: In PHP versions 8.0.* before 8.0.29, 8.1.* before 8.1.20, 8.2.* before 8.2.7 when using SOAP HTTP Digest Authentication, random value generator was not checked for failure, and was using narrower range of values than it should have. In case of random generator failure, it could lead to a disclosure of 31 bits of uninitialized memory from the client to the server, and it also made easier to a malicious server to guess the client's nonce.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A

  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A

  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are consideredrnot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2024-2408
  - CVSS Score: N/A
  - Description: The openssl_private_decrypt function in PHP, when using PKCS1 padding (OPENSSL_PKCS1_PADDING, which is the default), is vulnerable to the Marvin Attack unless it is used with an OpenSSL version that includes the changes from this pull request: https://github.com/openssl/openssl/pull/13817 (rsa_pkcs1_implicit_rejection). These changes are part of OpenSSL 3.2 and have also been backported to stable versions of various Linux distributions, as well as to the PHP builds provided for Windows since the previous release. All distributors and builders should ensure that this version is used to prevent PHP from being vulnerable.PHP Windows builds for the versions8.1.29,8.2.20 and8.3.8 and above include OpenSSL patches that fix the vulnerability.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5

  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.

- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.

- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."

- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5
  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.
- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2007-3205
  - CVSS Score: 5

  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8
  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.
- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.
- Vulnerability: CVE-2016-5387
  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.
- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8

  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.

- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5
  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690

  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377

  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-5585
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, the fix forCVE-2024-1874 does not work if the command name includes trailing spaces. Original issue:when using proc_open() command with array syntax, due to insufficient escaping, if the arguments of the executed command are controlled by a malicious user, the user can supply arguments that would execute arbitrary commands in Windows shell.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2023-3823
  - CVSS Score: N/A
  - Description: In PHP versions 8.0.* before 8.0.30, 8.1.* before 8.1.22, and 8.2.* before 8.2.8 various XML functions rely on libxml global state to track configuration variables, like whether external entities are loaded. This state is assumed to be unchanged unless the user explicitly changes it by calling appropriate function. However, since the state is process-global, other modules - such asImageMagick - may also use this library within the same process, and change that global state for their internal purposes, and leave it in a state where external entities loading is enabled. This can lead to the situation where external XML is parsed with external entities loaded, which can lead to disclosure of any local files accessible to PHP. This vulnerable state may persist in the same process across many requests, until the process is shut down.
- Vulnerability: CVE-2023-3824
  - CVSS Score: N/A
  - Description: In PHP version 8.0.* before 8.0.30, 8.1.* before 8.1.22, and 8.2.* before 8.2.8, when loading phar file, while reading PHAR directory entries, insufficient length checking may lead to a stack buffer overflow, leading potentially to memory corruption or RCE.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8

  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2024-5458
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, due to a code logic error, filtering functions such as filter_var when validating URLs(FILTER_VALIDATE_URL) for certain types of URLs the function will result in invalid user information (username + password part of URLs) being treated as valid user information. This may lead to the downstream code accepting invalid URLs as valid and parsing them incorrectly.

- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4

  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.

- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3
  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.
- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5

  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A

  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).

- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).

- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).

- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.

- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3
  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.
- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.
- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2022-28615

  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.55 IP Address: 159.149.53.248

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 80
  - Version: N/A
  - Location: https://whistleblowing.unimi.it/
- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: http://orvmsgkxjgibh7eybau7v63sohd4ca2ity4rodk4f7jswxo2aupd75id.onion/

No vulnerabilities found for this IP address.

11.56 IP Address: 159.149.133.67

- Organization: UNI-Milano
- Operating System: Ubuntu
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 4
- Low Vulnerabilities: 0
- Total Vulnerabilities: 4

Services Running on IP Address

- Service: nginx
  - Port: 443
  - Version: 1.18.0
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2023-44487
  - CVSS Score: N/A
  - Description: The HTTP/2 protocol allows a denial of service (server resource consumption) because request cancellation can reset many streams quickly, as exploited in the wild in August through October 2023.
- Vulnerability: CVE-2021-23017
  - CVSS Score: 6.8
  - Description: A security issue in nginx resolver was identified, which might allow an attacker who is able to forge UDP packets from the DNS server to cause 1-byte memory overwrite, resulting in worker process crash or potential other impact.
- Vulnerability: CVE-2021-3618
  - CVSS Score: 5.8
  - Description: ALPACA is an application layer protocol content confusion attack, exploiting TLS servers implementing different protocols but using compatible certificates, such as multi-domain or wildcard certificates. A MiTM attacker having access to victim's traffic at the TCP/IP layer can redirect traffic from one subdomain to another, resulting in a valid TLS session. This breaks the authentication of TLS and cross-protocol attacks may be possible where the behavior of one protocol service may compromise the other at the application layer.
- Vulnerability: CVE-2023-44487
  - CVSS Score: N/A
  - Description: The HTTP/2 protocol allows a denial of service (server resource consumption) because request cancellation can reset many streams quickly, as exploited in the wild in August through October 2023.
- Vulnerability: CVE-2021-23017
  - CVSS Score: 6.8

  - Description: A security issue in nginx resolver was identified, which might allow an attacker who is able to forge UDP packets from the DNS server to cause 1-byte memory overwrite, resulting in worker process crash or potential other impact.

- Vulnerability: CVE-2021-3618
  - CVSS Score: 5.8
  - Description: ALPACA is an application layer protocol content confusion attack, exploiting TLS servers implementing different protocols but using compatible certificates, such as multi-domain or wildcard certificates. A MiTM attacker having access to victim's traffic at the TCP/IP layer can redirect traffic from one subdomain to another, resulting in a valid TLS session. This breaks the authentication of TLS and cross-protocol attacks may be possible where the behavior of one protocol service may compromise the other at the application layer.

11.57 IP Address: 159.149.10.82

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: Postfix smtpd
  - Port: 465
  - Version: N/A
  - Location:

No vulnerabilities found for this IP address.

11.58 IP Address: 159.149.10.102

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: http://calendar.unimi.it/dav/principals/

No vulnerabilities found for this IP address.

11.59 IP Address: 159.149.116.206

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: nginx
  - Port: 443
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.60 IP Address: 159.149.130.130

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 6
- Medium Vulnerabilities: 27
- Low Vulnerabilities: 5
- Total Vulnerabilities: 39

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.7
  - Location:
- Service: N/A
  - Port: 53
  - Version: N/A
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.57
  - Location: https://dc2.ipa.di.unimi.it/ipa/ui
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.57
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6

  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.

- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.
- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.
- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.
- Vulnerability: CVE-2023-51385

  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.
- Vulnerability: CVE-2024-6387
  - CVSS Score: N/A
  - Description: A security regression (CVE-2006-5051) was discovered in OpenSSH's server (sshd). There is a race condition which can lead sshd to handle some signals in an unsafe manner. An unauthenticated, remote attacker may be able to trigger it by failing to authenticate within a set time period.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2022-3996
  - CVSS Score: N/A
  - Description: If an X.509 certificate contains a malformed policy constraint andpolicy processing is enabled, then a write lock will be taken twicerecursively. On some operating systems (most widely: Windows) thisresults in a denial of service when the affected process hangs. Policyprocessing being enabled on a publicly facing server is not consideredto be a common setup.Policy processing is enabled by passing the '-policy'argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.Update (31 March 2023): The description of the policy processing enablementwas corrected based on CVE-2023-0466.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-4203
  - CVSS Score: N/A
  - Description: A read buffer overrun can be triggered in X.509 certificate verification,specifically in name constraint checking. Note that this occursafter certificate chain signature verification and requires either aCA to have signed the malicious certificate or for the application tocontinue certificate verification despite failure to construct a pathto a trusted issuer.The read buffer overrun might result in a crash which could lead toa denial of service attack. In theory it could also result in the disclosureof private memory contents (such as private keys, or sensitive plaintext)although we are not aware of any working exploit leading to memorycontents disclosure as of the time of release of this advisory.In a TLS client, this can be triggered by connecting to a maliciousserver. In a TLS server, this can be triggered if the server requestsclient authentication and a malicious client connects.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2023-0216
  - CVSS Score: N/A
  - Description: An invalid pointer dereference on read can be triggered when anapplication tries to load malformed PKCS7 data with thed2i_PKCS7(), d2i_PKCS7_bio() or d2i_PKCS7_fp() functions.The result of the dereference is an application crash which couldlead to a denial of service attack. The TLS implementation in OpenSSLdoes not call this function however third party applications mightcall these functions on untrusted data.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2023-0401
  - CVSS Score: N/A

  - Description: A NULL pointer can be dereferenced when signatures are beingverified on PKCS7 signed or signedAndEnveloped data. In case the hashalgorithm used for the signature is known to the OpenSSL library butthe implementation of the hash algorithm is not available the digestinitialization will fail. There is a missing check for the returnvalue from the initialization function which later leads to invalidusage of the digest API most likely leading to a crash.The unavailability of an algorithm can be caused by using FIPSenabled configuration of providers or more commonly by not loadingthe legacy provider.PKCS7 data is processed by the SMIME library calls and also by thetime stamp (TS) library calls. The TLS implementation in OpenSSL doesnot call these functions however third party applications would beaffected if they call these functions to verify signatures on untrusteddata.

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A

  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2023-6129
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications runningon PowerPC CPU based platforms if the CPU provides vector instructions.Impact summary: If an attacker can influence whether the POLY1305 MACalgorithm is used, the application state might be corrupted with variousapplication dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL forPowerPC CPUs restores the contents of vector registers in a different orderthan they are saved. Thus the contents of some of these vector registersare corrupted when returning to the caller. The vulnerable code is used onlyon newer PowerPC processors supporting the PowerISA 2.07 instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However unless the compiler uses the vector registers for storingpointers, the most likely consequence, if any, would be an incorrect resultof some application dependent calculations or a crash leading to a denial ofservice.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3. If this cipher is enabled on the server a maliciousclient can influence whether this AEAD cipher is used. This implies thatTLS server applications using OpenSSL can be potentially impacted. Howeverwe are currently not aware of any concrete application that would be affectedby this issue therefore we consider this a Low severity security issue.

- Vulnerability: CVE-2023-43622
  - CVSS Score: N/A
  - Description: An attacker, opening a HTTP/2 connection with an initial window size of 0, was able to block handling of that connection indefinitely in Apache HTTP Server. This could be used to exhaust worker resources in the server, similar to the well known "slow loris" attack pattern.This has been fixed in version 2.4.58, so that such connection are terminated properly after the configured connection timeout.This issue affects Apache HTTP Server: from 2.4.55 through 2.4.57.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5

  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2023-0217
  - CVSS Score: N/A
  - Description: An invalid pointer dereference on read can be triggered when anapplication tries to check a malformed DSA public key by theEVP_PKEY_public_check() function. This will most likely leadto an application crash. This function can be called on publickeys supplied from untrusted sources which could allow an attackerto cause a denial of service attack.The TLS implementation in OpenSSL does not call this functionbut applications might call the function if there are additionalsecurity requirements imposed by standards such as FIPS 140-3.
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A

  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are consideredrnot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2023-2975
  - CVSS Score: N/A
  - Description: Issue summary: The AES-SIV cipher implementation contains a bug that causesit to ignore empty associated data entries which are unauthenticated asa consequence.Impact summary: Applications that use the AES-SIV algorithm and want toauthenticate empty data entries as associated data can be mislead by removingadding or reordering such empty entries as these are ignored by the OpenSSLimplementation. We are currently unaware of any such applications.The AES-SIV algorithm allows for authentication of multiple associateddata entries along with the encryption. To authenticate empty data theapplication has to call EVP_EncryptUpdate() (or EVP_CipherUpdate()) withNULL pointer as the output buffer and 0 as the input buffer length.The AES-SIV implementation in OpenSSL just returns success for such a callinstead of performing the associated data authentication operation.The empty data thus will not be authenticated.As this issue does not affect non-empty associated data authentication andwe expect it to be rare for an application to use empty associated dataentries this is qualified as Low severity issue.
- Vulnerability: CVE-2023-5363
  - CVSS Score: N/A

  - Description: Issue summary: A bug has been identified in the processing of key andinitialisation vector (IV) lengths. This can lead to potential truncationor overruns during the initialisation of some symmetric ciphers.Impact summary: A truncation in the IV can result in non-uniqueness,which could result in loss of confidentiality for some cipher modes.When calling EVP_EncryptInit_ex2(), EVP_DecryptInit_ex2() orEVP_CipherInit_ex2() the provided OSSL_PARAM array is processed afterthe key and IV have been established. Any alterations to the key length,via the "keylen" parameter or the IV length, via the "ivlen" parameter,within the OSSL_PARAM array will not take effect as intended, potentiallycausing truncation or overreading of these values. The following ciphersand cipher modes are impacted: RC2, RC4, RC5, CCM, GCM and OCB.For the CCM, GCM and OCB cipher modes, truncation of the IV can result inloss of confidentiality. For example, when following NIST's SP 800-38Dsection 8.2.1 guidance for constructing a deterministic IV for AES inGCM mode, truncation of the counter portion could lead to IV reuse.Both truncations and overruns of the key and overruns of the IV willproduce incorrect results and could, in some cases, trigger a memoryexception. However, these issues are not currently assessed as securitycritical.Changing the key and/or IV lengths is not considered to be a common operationand the vulnerable API was recently introduced. Furthermore it is likely thatapplication developers will have spotted this problem during testing sincedecryption would fail unless both peers in the communication were similarlyvulnerable. For these reasons we expect the probability of an application beingvulnerable to this to be quite low. However if an application is vulnerable thenthis issue is considered very serious. For these reasons we have assessed thisissue as Moderate severity overall.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this becausethe issue lies outside of the FIPS provider boundary.OpenSSL 3.1 and 3.0 are vulnerable to this issue.

- Vulnerability: CVE-2023-1255
  - CVSS Score: N/A
  - Description: Issue summary: The AES-XTS cipher decryption implementation for 64 bit ARMplatform contains a bug that could cause it to read past the input buffer,leading to a crash.Impact summary: Applications that use the AES-XTS algorithm on the 64 bit ARMplatform can crash in rare circumstances. The AES-XTS algorithm is usuallyused for disk encryption.The AES-XTS cipher decryption implementation for 64 bit ARM platform will readpast the end of the ciphertext buffer if the ciphertext size is 4 mod 5 in 16byte blocks, e.g. 144 bytes or 1024 bytes. If the memory after the ciphertextbuffer is unmapped, this will trigger a crash which results in a denial ofservice.If an attacker can control the size and location of the ciphertext bufferbeing decrypted by an application using AES-XTS on 64 bit ARM, theapplication is affected. This is fairly unlikely making this issuea Low severity one.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2022-3996
  - CVSS Score: N/A
  - Description: If an X.509 certificate contains a malformed policy constraint andpolicy processing is enabled, then a write lock will be taken twicerecursively. On some operating systems (most widely: Windows) thisresults in a denial of service when the affected process hangs. Policyprocessing being enabled on a publicly facing server is not consideredto be a common setup.Policy processing is enabled by passing the '-policy'argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.Update (31 March 2023): The description of the policy processing enablementwas corrected based on CVE-2023-0466.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-4203
  - CVSS Score: N/A

  - Description: A read buffer overrun can be triggered in X.509 certificate verification,specifically in name constraint checking. Note that this occursafter certificate chain signature verification and requires either aCA to have signed the malicious certificate or for the application tocontinue certificate verification despite failure to construct a pathto a trusted issuer.The read buffer overrun might result in a crash which could lead toa denial of service attack. In theory it could also result in the disclosureof private memory contents (such as private keys, or sensitive plaintext)although we are not aware of any working exploit leading to memorycontents disclosure as of the time of release of this advisory.In a TLS client, this can be triggered by connecting to a maliciousserver. In a TLS server, this can be triggered if the server requestsclient authentication and a malicious client connects.

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2023-0216
  - CVSS Score: N/A
  - Description: An invalid pointer dereference on read can be triggered when anapplication tries to load malformed PKCS7 data with thed2i_PKCS7(), d2i_PKCS7_bio() or d2i_PKCS7_fp() functions.The result of the dereference is an application crash which couldlead to a denial of service attack. The TLS implementation in OpenSSLdoes not call this function however third party applications mightcall these functions on untrusted data.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A

  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2023-0401
  - CVSS Score: N/A
  - Description: A NULL pointer can be dereferenced when signatures are beingverified on PKCS7 signed or signedAndEnveloped data. In case the hashalgorithm used for the signature is known to the OpenSSL library butthe implementation of the hash algorithm is not available the digestinitialization will fail. There is a missing check for the returnvalue from the initialization function which later leads to invalidusage of the digest API most likely leading to a crash.The unavailability of an algorithm can be caused by using FIPSenabled configuration of providers or more commonly by not loadingthe legacy provider.PKCS7 data is processed by the SMIME library calls and also by thetime stamp (TS) library calls. The TLS implementation in OpenSSL doesnot call these functions however third party applications would beaffected if they call these functions to verify signatures on untrusteddata.
- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A

  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A

  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A
  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2023-6129
  - CVSS Score: N/A
  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications runningon PowerPC CPU based platforms if the CPU provides vector instructions.Impact summary: If an attacker can influence whether the POLY1305 MACalgorithm is used, the application state might be corrupted with variousapplication dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL forPowerPC CPUs restores the contents of vector registers in a different orderthan they are saved. Thus the contents of some of these vector registersare corrupted when returning to the caller. The vulnerable code is used onlyon newer PowerPC processors supporting the PowerISA 2.07 instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However unless the compiler uses the vector registers for storingpointers, the most likely consequence, if any, would be an incorrect resultof some application dependent calculations or a crash leading to a denial ofservice.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3. If this cipher is enabled on the server a maliciousclient can influence whether this AEAD cipher is used. This implies thatTLS server applications using OpenSSL can be potentially impacted. Howeverwe are currently not aware of any concrete application that would be affectedby this issue therefore we consider this a Low severity security issue.
- Vulnerability: CVE-2023-43622
  - CVSS Score: N/A
  - Description: An attacker, opening a HTTP/2 connection with an initial window size of 0, was able to block handling of that connection indefinitely in Apache HTTP Server. This could be used to exhaust worker resources in the server, similar to the well known "slow loris" attack pattern.This has been fixed in version 2.4.58, so that such connection are terminated properly after the configured connection timeout.This issue affects Apache HTTP Server: from 2.4.55 through 2.4.57.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2023-0217
  - CVSS Score: N/A
  - Description: An invalid pointer dereference on read can be triggered when anapplication tries to check a malformed DSA public key by theEVP_PKEY_public_check() function. This will most likely leadto an application crash. This function can be called on publickeys supplied from untrusted sources which could allow an attackerto cause a denial of service attack.The TLS implementation in OpenSSL does not call this functionbut applications might call the function if there are additionalsecurity requirements imposed by standards such as FIPS 140-3.
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A

  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are consideredrnot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2023-2975
  - CVSS Score: N/A
  - Description: Issue summary: The AES-SIV cipher implementation contains a bug that causesit to ignore empty associated data entries which are unauthenticated asa consequence.Impact summary: Applications that use the AES-SIV algorithm and want toauthenticate empty data entries as associated data can be mislead by removingadding or reordering such empty entries as these are ignored by the OpenSSLimplementation. We are currently unaware of any such applications.The AES-SIV algorithm allows for authentication of multiple associateddata entries along with the encryption. To authenticate empty data theapplication has to call EVP_EncryptUpdate() (or EVP_CipherUpdate()) withNULL pointer as the output buffer and 0 as the input buffer length.The AES-SIV implementation in OpenSSL just returns success for such a callinstead of performing the associated data authentication operation.The empty data thus will not be authenticated.As this issue does not affect non-empty associated data authentication andwe expect it to be rare for an application to use empty associated dataentries this is qualified as Low severity issue.
- Vulnerability: CVE-2023-5363
  - CVSS Score: N/A

  - Description: Issue summary: A bug has been identified in the processing of key andinitialisation vector (IV) lengths. This can lead to potential truncationor overruns during the initialisation of some symmetric ciphers.Impact summary: A truncation in the IV can result in non-uniqueness,which could result in loss of confidentiality for some cipher modes.When calling EVP_EncryptInit_ex2(), EVP_DecryptInit_ex2() orEVP_CipherInit_ex2() the provided OSSL_PARAM array is processed afterthe key and IV have been established. Any alterations to the key length,via the "keylen" parameter or the IV length, via the "ivlen" parameter,within the OSSL_PARAM array will not take effect as intended, potentiallycausing truncation or overreading of these values. The following ciphersand cipher modes are impacted: RC2, RC4, RC5, CCM, GCM and OCB.For the CCM, GCM and OCB cipher modes, truncation of the IV can result inloss of confidentiality. For example, when following NIST's SP 800-38Dsection 8.2.1 guidance for constructing a deterministic IV for AES inGCM mode, truncation of the counter portion could lead to IV reuse.Both truncations and overruns of the key and overruns of the IV willproduce incorrect results and could, in some cases, trigger a memoryexception. However, these issues are not currently assessed as securitycritical.Changing the key and/or IV lengths is not considered to be a common operationand the vulnerable API was recently introduced. Furthermore it is likely thatapplication developers will have spotted this problem during testing sincedecryption would fail unless both peers in the communication were similarlyvulnerable. For these reasons we expect the probability of an application beingvulnerable to this to be quite low. However if an application is vulnerable thenthis issue is considered very serious. For these reasons we have assessed thisissue as Moderate severity overall.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this becausethe issue lies outside of the FIPS provider boundary.OpenSSL 3.1 and 3.0 are vulnerable to this issue.

- Vulnerability: CVE-2023-1255
  - CVSS Score: N/A
  - Description: Issue summary: The AES-XTS cipher decryption implementation for 64 bit ARMplatform contains a bug that could cause it to read past the input buffer,leading to a crash.Impact summary: Applications that use the AES-XTS algorithm on the 64 bit ARMplatform can crash in rare circumstances. The AES-XTS algorithm is usuallyused for disk encryption.The AES-XTS cipher decryption implementation for 64 bit ARM platform will readpast the end of the ciphertext buffer if the ciphertext size is 4 mod 5 in 16byte blocks, e.g. 144 bytes or 1024 bytes. If the memory after the ciphertextbuffer is unmapped, this will trigger a crash which results in a denial ofservice.If an attacker can control the size and location of the ciphertext bufferbeing decrypted by an application using AES-XTS on 64 bit ARM, theapplication is affected. This is fairly unlikely making this issuea Low severity one.

11.61 IP Address: 159.149.53.252

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.62 IP Address: 159.149.53.239

- Organization: UNI-Milano
- Operating System: Windows
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 2
- Low Vulnerabilities: 0
- Total Vulnerabilities: 2

Services Running on IP Address

- Service: Microsoft IIS httpd
  - Port: 80
  - Version: 8.0
  - Location: /
- Service: Microsoft IIS httpd
  - Port: 443
  - Version: 8.0
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-4078
  - CVSS Score: 5.1
  - Description: The IP Security feature in Microsoft Internet Information Services (IIS) 8.0 and 8.5 does not properly process wildcard allow and deny rules for domains within the "IP Address and Domain Restrictions" list, which makes it easier for remote attackers to bypass an intended rule set via an HTTP request, aka "IIS Security Feature Bypass Vulnerability."
- Vulnerability: CVE-2014-4078
  - CVSS Score: 5.1
  - Description: The IP Security feature in Microsoft Internet Information Services (IIS) 8.0 and 8.5 does not properly process wildcard allow and deny rules for domains within the "IP Address and Domain Restrictions" list, which makes it easier for remote attackers to bypass an intended rule set via an HTTP request, aka "IIS Security Feature Bypass Vulnerability."

11.63 IP Address: 52.101.68.12

- Organization: Microsoft Corporation
- Operating System: Windows
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: Microsoft Exchange smtpd
  - Port: 25
  - Version: N/A
  - Location:

No vulnerabilities found for this IP address.

11.64 IP Address: 159.149.104.132

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.65 IP Address: 159.149.53.247

- Organization: UNI-Milano
- Operating System: Windows
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: Microsoft IIS httpd
  - Port: 80
  - Version: 10.0
  - Location: /
- Service: Microsoft IIS httpd
  - Port: 443
  - Version: 10.0
  - Location: /

No vulnerabilities found for this IP address.

11.66 IP Address: 159.149.129.239

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 3
- High Vulnerabilities: 11
- Medium Vulnerabilities: 93
- Low Vulnerabilities: 10
- Total Vulnerabilities: 117

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 7.4
  - Location:
- Service: N/A
  - Port: 25
  - Version: N/A
  - Location:
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.6
  - Location: /
- Service: N/A
  - Port: 465
  - Version: N/A
  - Location:
- Service: Postfix smtpd
  - Port: 587
  - Version: N/A
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.

- Vulnerability: CVE-2019-6110
  - CVSS Score: 4
  - Description: In OpenSSH 7.9, due to accepting and displaying arbitrary stderr output from the server, a malicious server (or Man-in-The-Middle attacker) can manipulate the client output, for example to use ANSI control codes to hide additional files being transferred.
- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2018-15919
  - CVSS Score: 5
  - Description: Remotely observable behaviour in auth-gss2.c in OpenSSH through 7.8 could be used by remote attackers to detect existence of users on a target system when GSS2 is in use. NOTE: the discoverer states 'We understand that the OpenSSH developers do not want to treat such a username enumeration (or "oracle") as a vulnerability.'
- Vulnerability: CVE-2018-15473
  - CVSS Score: 5
  - Description: OpenSSH through 7.7 is prone to a user enumeration vulnerability due to not delaying bailout for an invalid authenticating user until after the packet containing the request has been fully parsed, related to auth2-gss.c, auth2-hostbased.c, and auth2-pubkey.c.
- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6
  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.
- Vulnerability: CVE-2017-15906
  - CVSS Score: 5
  - Description: The process_open function in sftp-server.c in OpenSSH before 7.6 does not properly prevent write operations in readonly mode, which allows attackers to create zero-length files.
- Vulnerability: CVE-2018-20685
  - CVSS Score: 2.6
  - Description: In OpenSSH 7.9, scp.c in the scp client allows remote SSH servers to bypass intended access restrictions via the filename of . or an empty filename. The impact is modifying the permissions of the target directory on the client side.

- Vulnerability: CVE-2020-14145
  - CVSS Score: 4.3
  - Description: The client side in OpenSSH 5.7 through 8.4 has an Observable Discrepancy leading to an information leak in the algorithm negotiation. This allows man-in-the-middle attackers to target initial connection attempts (where no host key for the server has been cached by the client). NOTE: some reports state that 8.5 and 8.6 are also affected.
- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.
- Vulnerability: CVE-2020-15778
  - CVSS Score: 6.8
  - Description: scp in OpenSSH through 8.3p1 allows command injection in the scp.c toremote function, as demonstrated by backtick characters in the destination argument. NOTE: the vendor reportedly has stated that they intentionally omit validation of "anomalous argument transfers" because that could "stand a great chance of breaking existing workflows."
- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.
- Vulnerability: CVE-2019-6111

  - CVSS Score: 5.8
  - Description: An issue was discovered in OpenSSH 7.9. Due to the scp implementation being derived from 1983 rcp, the server chooses which files/directories are sent to the client. However, the scp client only performs cursory validation of the object name returned (only directory traversal attacks are prevented). A malicious scp server (or Man-in-The-Middle attacker) can overwrite arbitrary files in the scp client target directory. If recursive operation (-r) is performed, the server can manipulate subdirectories as well (for example, to overwrite the .ssh/authorized_keys file).

- Vulnerability: CVE-2023-51385
  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.
- Vulnerability: CVE-2019-6109
  - CVSS Score: 4
  - Description: An issue was discovered in OpenSSH 7.9. Due to missing character encoding in the progress display, a malicious server (or Man-in-The-Middle attacker) can employ crafted object names to manipulate the client output, e.g., by using ANSI control codes to hide additional files being transferred. This affects refresh_progress_meter() in progressmeter.c.
- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3

  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.67 IP Address: 18.192.231.252

- Organization: A100 ROW GmbH
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 80
  - Version: N/A
  - Location: https://www.austenezzell.com/
- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: https://bin.re/

No vulnerabilities found for this IP address.

11.68 IP Address: 104.18.10.29

- Organization: Cloudflare, Inc.
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: http://www.unibs.it/it
- Service: N/A
  - Port: 2087
  - Version: N/A
  - Location:
- Service: N/A
  - Port: 8880
  - Version: N/A
  - Location:

No vulnerabilities found for this IP address.

11.69 IP Address: 159.149.53.186

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 22
- Medium Vulnerabilities: 164
- Low Vulnerabilities: 16
- Total Vulnerabilities: 206

Services Running on IP Address

- Service: Wowza Streaming Engine
  - Port: 443
  - Version: 4.7.7
  - Location: /
- Service: Wowza Streaming Engine
  - Port: 1935
  - Version: 4.7.7
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3

  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).

- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8

  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786

  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n2̂) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using 'OIDCPreservePost On'.
- Vulnerability: CVE-2024-38476

  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5

  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167

  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.70 IP Address: 52.101.73.4

- Organization: Microsoft Corporation
- Operating System: Windows
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: Microsoft Exchange smtpd
  - Port: 25
  - Version: N/A
  - Location:

No vulnerabilities found for this IP address.

11.71 IP Address: 159.149.129.232

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 0
- Medium Vulnerabilities: 3
- Low Vulnerabilities: 1
- Total Vulnerabilities: 5

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.7
  - Location:
- Service: nginx
  - Port: 80
  - Version: N/A
  - Location: https://gitlab.di.unimi.it:443/
- Service: GitLab Self-Managed
  - Port: 443
  - Version: N/A
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6
  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.
- Vulnerability: CVE-2008-3844

  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.

- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.

- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A
  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A

  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.

- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.

- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.

- Vulnerability: CVE-2023-51385
  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.

- Vulnerability: CVE-2024-6387
  - CVSS Score: N/A
  - Description: A security regression (CVE-2006-5051) was discovered in OpenSSH's server (sshd). There is a race condition which can lead sshd to handle some signals in an unsafe manner. An unauthenticated, remote attacker may be able to trigger it by failing to authenticate within a set time period.

11.72 IP Address: 3.126.205.183

- Organization: A100 ROW GmbH
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: AWS ELB
  - Port: 443
  - Version: 2.0
  - Location: https://login.microsoftonline.com/21956b19-fed2-44b7-90cf-b6d281c0a42a/oauth2/

No vulnerabilities found for this IP address.

11.73 IP Address: 159.149.45.133

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 22
- Medium Vulnerabilities: 164
- Low Vulnerabilities: 16
- Total Vulnerabilities: 206

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.6
  - Location: https://cdd-rappresentanti.fisica.unimi.it
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.6
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3

  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).

- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8

  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786

  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n2̂) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using 'OIDCPreservePost On'.
- Vulnerability: CVE-2024-38476

  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5

  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167

  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.74 IP Address: 159.149.133.45

- Organization: UNI-Milano
- Operating System: Ubuntu
- Critical Vulnerabilities: 0
- High Vulnerabilities: 11
- Medium Vulnerabilities: 50
- Low Vulnerabilities: 4
- Total Vulnerabilities: 65

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 7.6p1 Ubuntu-4ubuntu0.5
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.29
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.

- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5

  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-1333
  - CVSS Score: 5
  - Description: By specially crafting HTTP/2 requests, workers would be allocated 60 seconds longer than necessary, leading to worker exhaustion and a denial of service. Fixed in Apache HTTP Server 2.4.34 (Affected 2.4.18-2.4.30,2.4.33).

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2018-11763
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.17 to 2.4.34, by sending continuous, large SETTINGS frames a client can occupy a connection, server thread and CPU time without any connection timeout coming to effect. This affects only HTTP/2 connections. A possible mitigation is to not enable the h2 protocol.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.

- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2

  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2022-31813

  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2020-11022
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.2 and before 3.5.0, passing HTML from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.

- Vulnerability: CVE-2020-11023
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.0.3 and before 3.5.0, passing HTML containing <option> elements from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.

- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.
- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3

  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.

- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.

- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.

- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2019-11358
  - CVSS Score: 4.3
  - Description: jQuery before 3.4.0, as used in Drupal, Backdrop CMS, and other products, mishandles jQuery.extend(true, {}, ...) because of Object.prototype pollution. If an unsanitized source object contained an enumerable __proto__ property, it could extend the native Object.prototype.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5

  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows

- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A

  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

11.75 IP Address: 159.149.129.236

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 28
- Medium Vulnerabilities: 102
- Low Vulnerabilities: 8
- Total Vulnerabilities: 138

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 7.4p1 Debian 10+deb9u7
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.25
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.25
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2017-3169
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_ssl may dereference a NULL pointer when third-party modules call ap_hook_process_connection() during an HTTP request to an HTTPS port.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2013-2765

  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.

- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.

- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow

- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5

  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-1333
  - CVSS Score: 5
  - Description: By specially crafting HTTP/2 requests, workers would be allocated 60 seconds longer than necessary, leading to worker exhaustion and a denial of service. Fixed in Apache HTTP Server 2.4.34 (Affected 2.4.18-2.4.30,2.4.33).

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2018-11763
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.17 to 2.4.34, by sending continuous, large SETTINGS frames a client can occupy a connection, server thread and CPU time without any connection timeout coming to effect. This affects only HTTP/2 connections. A possible mitigation is to not enable the h2 protocol.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0211

  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2017-7668
  - CVSS Score: 5
  - Description: The HTTP strict parsing changes added in Apache httpd 2.2.32 and 2.4.24 introduced a bug in token list parsing, which allows ap_find_token() to search past the end of its input string. By maliciously crafting a sequence of request headers, an attacker may be able to cause a segmentation fault, or to force ap_find_token() to return an incorrect value.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3

  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2017-7659
  - CVSS Score: 5
  - Description: A maliciously constructed HTTP/2 request could cause mod_http2 in Apache HTTP Server 2.4.24, 2.4.25 to dereference a NULL pointer and crash the server process.

- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.

- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5

  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A

  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8

  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2017-3169
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_ssl may dereference a NULL pointer when third-party modules call ap_hook_process_connection() during an HTTP request to an HTTPS port.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2020-35452

  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow

- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-1333
  - CVSS Score: 5
  - Description: By specially crafting HTTP/2 requests, workers would be allocated 60 seconds longer than necessary, leading to worker exhaustion and a denial of service. Fixed in Apache HTTP Server 2.4.34 (Affected 2.4.18-2.4.30,2.4.33).

- Vulnerability: CVE-2022-22720

  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2018-11763
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.17 to 2.4.34, by sending continuous, large SETTINGS frames a client can occupy a connection, server thread and CPU time without any connection timeout coming to effect. This affects only HTTP/2 connections. A possible mitigation is to not enable the h2 protocol.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8

  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5

  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2017-7668
  - CVSS Score: 5
  - Description: The HTTP strict parsing changes added in Apache httpd 2.2.32 and 2.4.24 introduced a bug in token list parsing, which allows ap_find_token() to search past the end of its input string. By maliciously crafting a sequence of request headers, an attacker may be able to cause a segmentation fault, or to force ap_find_token() to return an incorrect value.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2017-7659
  - CVSS Score: 5
  - Description: A maliciously constructed HTTP/2 request could cause mod_http2 in Apache HTTP Server 2.4.24, 2.4.25 to dereference a NULL pointer and crash the server process.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.
- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302

  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.

- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2024-40898

  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

11.76 IP Address: 193.205.78.171

- Organization: INFN - Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 27
- Medium Vulnerabilities: 105
- Low Vulnerabilities: 6
- Total Vulnerabilities: 142

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.37
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.37
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2019-0215
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 releases 2.4.37 and 2.4.38, a bug in mod_ssl when using per-location client certificate verification with TLSv1.3 allowed a client to bypass configured access control restrictions.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10

  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).

- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A

  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490

  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the 'Cache-Digest' header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows

- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A

  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are consideredrnot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2019-0197
  - CVSS Score: 4.9
  - Description: A vulnerability was found in Apache HTTP Server 2.4.34 to 2.4.38. When HTTP/2 was enabled for a http: host or H2Upgrade was enabled for h2 on a https: host, an Upgrade request from http/1.1 to http/2 that was not the first request on a connection could lead to a misconfiguration and crash. Server that never enabled the h2 protocol or that only enabled it for https: and did not set "H2Upgrade on" are unaffected by this issue.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220

  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-3711
  - CVSS Score: 7.5
  - Description: In order to decrypt SM2 encrypted data an application is expected to call the API function EVP_PKEY_decrypt(). Typically an application will call this function twice. The first time, on entry, the "out" parameter can be NULL and, on exit, the "outlen" parameter is populated with the buffer size required to hold the decrypted plaintext. The application can then allocate a sufficiently sized buffer and call EVP_PKEY_decrypt() again, but this time passing a non-NULL value for the "out" parameter. A bug in the implementation of the SM2 decryption code means that the calculation of the buffer size required to hold the plaintext returned by the first call to EVP_PKEY_decrypt() can be smaller than the actual size required by the second call. This can lead to a buffer overflow when EVP_PKEY_decrypt() is called by the application a second time with a buffer that is too small. A malicious attacker who is able present SM2 content for decryption to an application could cause attacker chosen data to overflow the buffer by up to a maximum of 62 bytes altering the contents of other data held after the buffer, possibly changing application behaviour or causing the application to crash. The location of the buffer is application dependent but is typically heap allocated. Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k).
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4

  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2019-10097
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4.32-2.4.39, when mod_remoteip was configured to use a trusted intermediary proxy server using the "PROXY" protocol, a specially crafted PROXY header could trigger a stack buffer overflow or NULL pointer deference. This vulnerability could only be triggered by a trusted proxy and not by untrusted HTTP clients.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3

  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2022-2097
  - CVSS Score: 5
  - Description: AES OCB mode for 32-bit x86 platforms using the AES-NI assembly optimised implementation will not encrypt the entirety of the data under some circumstances. This could reveal sixteen bytes of data that was preexisting in the memory that wasn't written. In the special case of "in place" encryption, sixteen bytes of the plaintext would be revealed. Since OpenSSL does not support OCB based cipher suites for TLS and DTLS, they are both unaffected. Fixed in OpenSSL 3.0.5 (Affected 3.0.0-3.0.4). Fixed in OpenSSL 1.1.1q (Affected 1.1.1-1.1.1p).
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).
- Vulnerability: CVE-2012-4001

  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1

  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2019-0215
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 releases 2.4.37 and 2.4.38, a bug in mod_ssl when using per-location client certificate verification with TLSv1.3 allowed a client to bypass configured access control restrictions.

- Vulnerability: CVE-2024-4577

  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316

  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2023-3247
  - CVSS Score: N/A
  - Description: In PHP versions 8.0.* before 8.0.29, 8.1.* before 8.1.20, 8.2.* before 8.2.7 when using SOAP HTTP Digest Authentication, random value generator was not checked for failure, and was using narrower range of values than it should have. In case of random generator failure, it could lead to a disclosure of 31 bits of uninitialized memory from the client to the server, and it also made easier to a malicious server to guess the client's nonce.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).

- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n2̂) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2024-2408
  - CVSS Score: N/A
  - Description: The openssl_private_decrypt function in PHP, when using PKCS1 padding (OPENSSL_PKCS1_PADDING, which is the default), is vulnerable to the Marvin Attack unless it is used with an OpenSSL version that includes the changes from this pull request: https://github.com/openssl/openssl/pull/13817 (rsa_pkcs1_implicit_rejection). These changes are part of OpenSSL 3.2 and have also been backported to stable versions of various Linux distributions, as well as to the PHP builds provided for Windows since the previous release. All distributors and builders should ensure that this version is used to prevent PHP from being vulnerable.PHP Windows builds for the versions8.1.29,8.2.20 and8.3.8 and above include OpenSSL patches that fix the vulnerability.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5

  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.

- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2019-0197
  - CVSS Score: 4.9
  - Description: A vulnerability was found in Apache HTTP Server 2.4.34 to 2.4.38. When HTTP/2 was enabled for a http: host or H2Upgrade was enabled for h2 on a https: host, an Upgrade request from http/1.1 to http/2 that was not the first request on a connection could lead to a misconfiguration and crash. Server that never enabled the h2 protocol or that only enabled it for https: and did not set "H2Upgrade on" are unaffected by this issue.

- Vulnerability: CVE-2019-0196

  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.

- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.

- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.

- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3

  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A
  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service

- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2007-3205

  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.

- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-3711
  - CVSS Score: 7.5
  - Description: In order to decrypt SM2 encrypted data an application is expected to call the API function EVP_PKEY_decrypt(). Typically an application will call this function twice. The first time, on entry, the "out" parameter can be NULL and, on exit, the "outlen" parameter is populated with the buffer size required to hold the decrypted plaintext. The application can then allocate a sufficiently sized buffer and call EVP_PKEY_decrypt() again, but this time passing a non-NULL value for the "out" parameter. A bug in the implementation of the SM2 decryption code means that the calculation of the buffer size required to hold the plaintext returned by the first call to EVP_PKEY_decrypt() can be smaller than the actual size required by the second call. This can lead to a buffer overflow when EVP_PKEY_decrypt() is called by the application a second time with a buffer that is too small. A malicious attacker who is able present SM2 content for decryption to an application could cause attacker chosen data to overflow the buffer by up to a maximum of 62 bytes altering the contents of other data held after the buffer, possibly changing application behaviour or causing the application to crash. The location of the buffer is application dependent but is typically heap allocated. Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k).
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A

  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).
- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2019-10092

  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465

  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2019-10097
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4.32-2.4.39, when mod_remoteip was configured to use a trusted intermediary proxy server using the "PROXY" protocol, a specially crafted PROXY header could trigger a stack buffer overflow or NULL pointer deference. This vulnerability could only be triggered by a trusted proxy and not by untrusted HTTP clients.

- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3

  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.

- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE

- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3

  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2024-5585
  - CVSS Score: N/A

  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, the fix forCVE-2024-1874 does not work if the command name includes trailing spaces. Original issue:when using proc_open() command with array syntax, due to insufficient escaping, if the arguments of the executed command are controlled by a malicious user, the user can supply arguments that would execute arbitrary commands in Windows shell.

- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5
  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2023-3823
  - CVSS Score: N/A

  - Description: In PHP versions 8.0.* before 8.0.30, 8.1.* before 8.1.22, and 8.2.* before 8.2.8 various XML functions rely on libxml global state to track configuration variables, like whether external entities are loaded. This state is assumed to be unchanged unless the user explicitly changes it by calling appropriate function. However, since the state is process-global, other modules - such asImageMagick - may also use this library within the same process, and change that global state for their internal purposes, and leave it in a state where external entities loading is enabled. This can lead to the situation where external XML is parsed with external entities loaded, which can lead to disclosure of any local files accessible to PHP. This vulnerable state may persist in the same process across many requests, until the process is shut down.

- Vulnerability: CVE-2022-2097
  - CVSS Score: 5
  - Description: AES OCB mode for 32-bit x86 platforms using the AES-NI assembly optimised implementation will not encrypt the entirety of the data under some circumstances. This could reveal sixteen bytes of data that was preexisting in the memory that wasn't written. In the special case of "in place" encryption, sixteen bytes of the plaintext would be revealed. Since OpenSSL does not support OCB based cipher suites for TLS and DTLS, they are both unaffected. Fixed in OpenSSL 3.0.5 (Affected 3.0.0-3.0.4). Fixed in OpenSSL 1.1.1q (Affected 1.1.1-1.1.1p).
- Vulnerability: CVE-2023-3824
  - CVSS Score: N/A
  - Description: In PHP version 8.0.* before 8.0.30, 8.1.* before 8.1.22, and 8.2.* before 8.2.8, when loading phar file, while reading PHAR directory entries, insufficient length checking may lead to a stack buffer overflow, leading potentially to memory corruption or RCE.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2024-5458
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, due to a code logic error, filtering functions such as filter_var when validating URLs(FILTER_VALIDATE_URL) for certain types of URLs the function will result in invalid user information (username + password part of URLs) being treated as valid user information. This may lead to the downstream code accepting invalid URLs as valid and parsing them incorrectly.

- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-37436

  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942

  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.77 IP Address: 159.149.103.62

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 12
- Medium Vulnerabilities: 44
- Low Vulnerabilities: 3
- Total Vulnerabilities: 59

Services Running on IP Address

- Service: EZproxy web proxy
  - Port: 80
  - Version: N/A
  - Location: http://pros1.lib.unimi.it:8080/ezpauthsecured.php?institute=UNIMI&url=
- Service: EZproxy web proxy
  - Port: 443
  - Version: N/A
  - Location: http://pros1.lib.unimi.it:8080/ezpauthsecured.php?institute=UNIMI&url=
- Service: Apache httpd
  - Port: 8080
  - Version: 2.4.37
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A

  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.

- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.

- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow

- Vulnerability: CVE-2019-0215
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 releases 2.4.37 and 2.4.38, a bug in mod_ssl when using per-location client certificate verification with TLSv1.3 allowed a client to bypass configured access control restrictions.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2023-27522

  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2019-10097

  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4.32-2.4.39, when mod_remoteip was configured to use a trusted intermediary proxy server using the "PROXY" protocol, a specially crafted PROXY header could trigger a stack buffer overflow or NULL pointer deference. This vulnerability could only be triggered by a trusted proxy and not by untrusted HTTP clients.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2021-32786

  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5

  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service

- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2019-0197
  - CVSS Score: 4.9
  - Description: A vulnerability was found in Apache HTTP Server 2.4.34 to 2.4.38. When HTTP/2 was enabled for a http: host or H2Upgrade was enabled for h2 on a https: host, an Upgrade request from http/1.1 to http/2 that was not the first request on a connection could lead to a misconfiguration and crash. Server that never enabled the h2 protocol or that only enabled it for https: and did not set "H2Upgrade on" are unaffected by this issue.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A

  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

11.78 IP Address: 159.149.147.136

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 0
- Medium Vulnerabilities: 11
- Low Vulnerabilities: 2
- Total Vulnerabilities: 14

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 7.4
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.
- Vulnerability: CVE-2019-6110
  - CVSS Score: 4
  - Description: In OpenSSH 7.9, due to accepting and displaying arbitrary stderr output from the server, a malicious server (or Man-in-The-Middle attacker) can manipulate the client output, for example to use ANSI control codes to hide additional files being transferred.
- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2018-15919
  - CVSS Score: 5
  - Description: Remotely observable behaviour in auth-gss2.c in OpenSSH through 7.8 could be used by remote attackers to detect existence of users on a target system when GSS2 is in use. NOTE: the discoverer states 'We understand that the OpenSSH developers do not want to treat such a username enumeration (or "oracle") as a vulnerability.'

- Vulnerability: CVE-2018-15473
  - CVSS Score: 5
  - Description: OpenSSH through 7.7 is prone to a user enumeration vulnerability due to not delaying bailout for an invalid authenticating user until after the packet containing the request has been fully parsed, related to auth2-gss.c, auth2-hostbased.c, and auth2-pubkey.c.
- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6
  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.
- Vulnerability: CVE-2017-15906
  - CVSS Score: 5
  - Description: The process_open function in sftp-server.c in OpenSSH before 7.6 does not properly prevent write operations in readonly mode, which allows attackers to create zero-length files.
- Vulnerability: CVE-2018-20685
  - CVSS Score: 2.6
  - Description: In OpenSSH 7.9, scp.c in the scp client allows remote SSH servers to bypass intended access restrictions via the filename of . or an empty filename. The impact is modifying the permissions of the target directory on the client side.
- Vulnerability: CVE-2020-14145
  - CVSS Score: 4.3
  - Description: The client side in OpenSSH 5.7 through 8.4 has an Observable Discrepancy leading to an information leak in the algorithm negotiation. This allows man-in-the-middle attackers to target initial connection attempts (where no host key for the server has been cached by the client). NOTE: some reports state that 8.5 and 8.6 are also affected.
- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.
- Vulnerability: CVE-2020-15778
  - CVSS Score: 6.8

  - Description: scp in OpenSSH through 8.3p1 allows command injection in the scp.c toremote function, as demonstrated by backtick characters in the destination argument. NOTE: the vendor reportedly has stated that they intentionally omit validation of "anomalous argument transfers" because that could "stand a great chance of breaking existing workflows."

- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A
  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.

- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.

- Vulnerability: CVE-2021-41617

  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.
- Vulnerability: CVE-2019-6111
  - CVSS Score: 5.8
  - Description: An issue was discovered in OpenSSH 7.9. Due to the scp implementation being derived from 1983 rcp, the server chooses which files/directories are sent to the client. However, the scp client only performs cursory validation of the object name returned (only directory traversal attacks are prevented). A malicious scp server (or Man-in-The-Middle attacker) can overwrite arbitrary files in the scp client target directory. If recursive operation (-r) is performed, the server can manipulate subdirectories as well (for example, to overwrite the .ssh/authorized_keys file).
- Vulnerability: CVE-2023-51385
  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.
- Vulnerability: CVE-2019-6109
  - CVSS Score: 4
  - Description: An issue was discovered in OpenSSH 7.9. Due to missing character encoding in the progress display, a malicious server (or Man-in-The-Middle attacker) can employ crafted object names to manipulate the client output, e.g., by using ANSI control codes to hide additional files being transferred. This affects refresh_progress_meter() in progressmeter.c.

11.79 IP Address: 104.18.11.29

- Organization: Cloudflare, Inc.
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 80
  - Version: N/A
  - Location: https://www.unibs.it/
- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: http://www.unibs.it/it
- Service: N/A
  - Port: 2087
  - Version: N/A
  - Location:
- Service: N/A
  - Port: 8880
  - Version: N/A
  - Location:

No vulnerabilities found for this IP address.

11.80 IP Address: 35.185.199.199

- Organization: Google LLC
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 13
- Medium Vulnerabilities: 31
- Low Vulnerabilities: 4
- Total Vulnerabilities: 48

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.9p1 Ubuntu-3ubuntu0.10
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.52
  - Location: https://givingtrax.com/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.52
  - Location: https://www.givingtrax.com/

Vulnerabilities Found

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A

  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2013-0941

  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2022-22721

  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2013-0941

  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

11.81 IP Address: 159.149.129.101

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 9.6p1 Ubuntu-3ubuntu13.4
  - Location:
- Service: N/A
  - Port: 8000
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.82 IP Address: 159.149.129.224

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 6
- Medium Vulnerabilities: 24
- Low Vulnerabilities: 4
- Total Vulnerabilities: 34

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.58
  - Location: https://adapt-lab.ricerca.di.unimi.it/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.58
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A

  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5

  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2023-6129
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications runningon PowerPC CPU based platforms if the CPU provides vector instructions.Impact summary: If an attacker can influence whether the POLY1305 MACalgorithm is used, the application state might be corrupted with variousapplication dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL forPowerPC CPUs restores the contents of vector registers in a different orderthan they are saved. Thus the contents of some of these vector registersare corrupted when returning to the caller. The vulnerable code is used onlyon newer PowerPC processors supporting the PowerISA 2.07 instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However unless the compiler uses the vector registers for storingpointers, the most likely consequence, if any, would be an incorrect resultof some application dependent calculations or a crash leading to a denial ofservice.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3. If this cipher is enabled on the server a maliciousclient can influence whether this AEAD cipher is used. This implies thatTLS server applications using OpenSSL can be potentially impacted. Howeverwe are currently not aware of any concrete application that would be affectedby this issue therefore we consider this a Low severity security issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5

  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2023-2975
  - CVSS Score: N/A
  - Description: Issue summary: The AES-SIV cipher implementation contains a bug that causesit to ignore empty associated data entries which are unauthenticated asa consequence.Impact summary: Applications that use the AES-SIV algorithm and want toauthenticate empty data entries as associated data can be mislead by removingadding or reordering such empty entries as these are ignored by the OpenSSLimplementation. We are currently unaware of any such applications.The AES-SIV algorithm allows for authentication of multiple associateddata entries along with the encryption. To authenticate empty data theapplication has to call EVP_EncryptUpdate() (or EVP_CipherUpdate()) withNULL pointer as the output buffer and 0 as the input buffer length.The AES-SIV implementation in OpenSSL just returns success for such a callinstead of performing the associated data authentication operation.The empty data thus will not be authenticated.As this issue does not affect non-empty associated data authentication andwe expect it to be rare for an application to use empty associated dataentries this is qualified as Low severity issue.

- Vulnerability: CVE-2023-5363
  - CVSS Score: N/A
  - Description: Issue summary: A bug has been identified in the processing of key andinitialisation vector (IV) lengths. This can lead to potential truncationor overruns during the initialisation of some symmetric ciphers.Impact summary: A truncation in the IV can result in non-uniqueness,which could result in loss of confidentiality for some cipher modes.When calling EVP_EncryptInit_ex2(), EVP_DecryptInit_ex2() orEVP_CipherInit_ex2() the provided OSSL_PARAM array is processed afterthe key and IV have been established. Any alterations to the key length,via the "keylen" parameter or the IV length, via the "ivlen" parameter,within the OSSL_PARAM array will not take effect as intended, potentiallycausing truncation or overreading of these values. The following ciphersand cipher modes are impacted: RC2, RC4, RC5, CCM, GCM and OCB.For the CCM, GCM and OCB cipher modes, truncation of the IV can result inloss of confidentiality. For example, when following NIST's SP 800-38Dsection 8.2.1 guidance for constructing a deterministic IV for AES inGCM mode, truncation of the counter portion could lead to IV reuse.Both truncations and overruns of the key and overruns of the IV willproduce incorrect results and could, in some cases, trigger a memoryexception. However, these issues are not currently assessed as securitycritical.Changing the key and/or IV lengths is not considered to be a common operationand the vulnerable API was recently introduced. Furthermore it is likely thatapplication developers will have spotted this problem during testing sincedecryption would fail unless both peers in the communication were similarlyvulnerable. For these reasons we expect the probability of an application beingvulnerable to this to be quite low. However if an application is vulnerable thenthis issue is considered very serious. For these reasons we have assessed thisissue as Moderate severity overall.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this becausethe issue lies outside of the FIPS provider boundary.OpenSSL 3.1 and 3.0 are vulnerable to this issue.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2012-4001

  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2023-6129
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications runningon PowerPC CPU based platforms if the CPU provides vector instructions.Impact summary: If an attacker can influence whether the POLY1305 MACalgorithm is used, the application state might be corrupted with variousapplication dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL forPowerPC CPUs restores the contents of vector registers in a different orderthan they are saved. Thus the contents of some of these vector registersare corrupted when returning to the caller. The vulnerable code is used onlyon newer PowerPC processors supporting the PowerISA 2.07 instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However unless the compiler uses the vector registers for storingpointers, the most likely consequence, if any, would be an incorrect resultof some application dependent calculations or a crash leading to a denial ofservice.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3. If this cipher is enabled on the server a maliciousclient can influence whether this AEAD cipher is used. This implies thatTLS server applications using OpenSSL can be potentially impacted. Howeverwe are currently not aware of any concrete application that would be affectedby this issue therefore we consider this a Low severity security issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5

  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2023-2975
  - CVSS Score: N/A
  - Description: Issue summary: The AES-SIV cipher implementation contains a bug that causesit to ignore empty associated data entries which are unauthenticated asa consequence.Impact summary: Applications that use the AES-SIV algorithm and want toauthenticate empty data entries as associated data can be mislead by removingadding or reordering such empty entries as these are ignored by the OpenSSLimplementation. We are currently unaware of any such applications.The AES-SIV algorithm allows for authentication of multiple associateddata entries along with the encryption. To authenticate empty data theapplication has to call EVP_EncryptUpdate() (or EVP_CipherUpdate()) withNULL pointer as the output buffer and 0 as the input buffer length.The AES-SIV implementation in OpenSSL just returns success for such a callinstead of performing the associated data authentication operation.The empty data thus will not be authenticated.As this issue does not affect non-empty associated data authentication andwe expect it to be rare for an application to use empty associated dataentries this is qualified as Low severity issue.

- Vulnerability: CVE-2023-5363
  - CVSS Score: N/A
  - Description: Issue summary: A bug has been identified in the processing of key andinitialisation vector (IV) lengths. This can lead to potential truncationor overruns during the initialisation of some symmetric ciphers.Impact summary: A truncation in the IV can result in non-uniqueness,which could result in loss of confidentiality for some cipher modes.When calling EVP_EncryptInit_ex2(), EVP_DecryptInit_ex2() orEVP_CipherInit_ex2() the provided OSSL_PARAM array is processed afterthe key and IV have been established. Any alterations to the key length,via the "keylen" parameter or the IV length, via the "ivlen" parameter,within the OSSL_PARAM array will not take effect as intended, potentiallycausing truncation or overreading of these values. The following ciphersand cipher modes are impacted: RC2, RC4, RC5, CCM, GCM and OCB.For the CCM, GCM and OCB cipher modes, truncation of the IV can result inloss of confidentiality. For example, when following NIST's SP 800-38Dsection 8.2.1 guidance for constructing a deterministic IV for AES inGCM mode, truncation of the counter portion could lead to IV reuse.Both truncations and overruns of the key and overruns of the IV willproduce incorrect results and could, in some cases, trigger a memoryexception. However, these issues are not currently assessed as securitycritical.Changing the key and/or IV lengths is not considered to be a common operationand the vulnerable API was recently introduced. Furthermore it is likely thatapplication developers will have spotted this problem during testing sincedecryption would fail unless both peers in the communication were similarlyvulnerable. For these reasons we expect the probability of an application beingvulnerable to this to be quite low. However if an application is vulnerable thenthis issue is considered very serious. For these reasons we have assessed thisissue as Moderate severity overall.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this becausethe issue lies outside of the FIPS provider boundary.OpenSSL 3.1 and 3.0 are vulnerable to this issue.

11.83 IP Address: 159.149.53.90

- Organization: UNI-Milano
- Operating System: Windows
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 1
- Low Vulnerabilities: 0
- Total Vulnerabilities: 1

Services Running on IP Address

- Service: Microsoft IIS httpd
  - Port: 80
  - Version: 8.5
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-4078
  - CVSS Score: 5.1
  - Description: The IP Security feature in Microsoft Internet Information Services (IIS) 8.0 and 8.5 does not properly process wildcard allow and deny rules for domains within the "IP Address and Domain Restrictions" list, which makes it easier for remote attackers to bypass an intended rule set via an HTTP request, aka "IIS Security Feature Bypass Vulnerability."

11.84 IP Address: 159.149.130.138

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 6
- Medium Vulnerabilities: 17
- Low Vulnerabilities: 5
- Total Vulnerabilities: 29

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.7
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.62
  - Location: https://159.149.130.138/
- Service: N/A
  - Port: 993
  - Version: N/A
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6
  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.
- Vulnerability: CVE-2008-3844

  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.

- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.

- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A
  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A

  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.

- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.

- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.

- Vulnerability: CVE-2023-51385
  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.

- Vulnerability: CVE-2024-6387
  - CVSS Score: N/A
  - Description: A security regression (CVE-2006-5051) was discovered in OpenSSH's server (sshd). There is a race condition which can lead sshd to handle some signals in an unsafe manner. An unauthenticated, remote attacker may be able to trigger it by failing to authenticate within a set time period.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2013-4365

  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3

  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

11.85 IP Address: 159.149.145.162

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.2p1 Ubuntu-4ubuntu0.11
  - Location:
- Service: OpenSSH
  - Port: 2222
  - Version: 8.9p1 Ubuntu-3ubuntu0.10
  - Location:

No vulnerabilities found for this IP address.

11.86 IP Address: 159.149.104.130

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.87 IP Address: 159.149.53.241

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: Pure-FTPd
  - Port: 21
  - Version: N/A
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: N/A
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.88 IP Address: 52.59.135.101

- Organization: A100 ROW GmbH
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: AWS ELB
  - Port: 80
  - Version: 2.0
  - Location: https://52.59.135.101:443/

No vulnerabilities found for this IP address.

11.89 IP Address: 159.149.15.70

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 13
- Medium Vulnerabilities: 32
- Low Vulnerabilities: 4
- Total Vulnerabilities: 49

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.52
  - Location: https://infermieristica.ctu.unimi.it/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.52
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5

  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2023-45802

  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2023-5544
  - CVSS Score: N/A
  - Description: Wiki comments required additional sanitizing and access restrictions to prevent a stored XSS risk and potential IDOR risk.

- Vulnerability: CVE-2023-5545
  - CVSS Score: N/A
  - Description: H5P metadata automatically populated the author with the user's username, which could be sensitive information.
- Vulnerability: CVE-2023-5546
  - CVSS Score: N/A
  - Description: ID numbers displayed in the quiz grading report required additional sanitizing to prevent a stored XSS risk.
- Vulnerability: CVE-2023-5547
  - CVSS Score: N/A
  - Description: The course upload preview contained an XSS risk for users uploading unsafe data.
- Vulnerability: CVE-2023-5540
  - CVSS Score: N/A
  - Description: A remote code execution risk was identified in the IMSCP activity. By default this was only available to teachers and managers.
- Vulnerability: CVE-2023-5541
  - CVSS Score: N/A
  - Description: The CSV grade import method contained an XSS risk for users importing the spreadsheet, if it contained unsafe content.
- Vulnerability: CVE-2023-5543
  - CVSS Score: N/A
  - Description: When duplicating a BigBlueButton activity, the original meeting ID was also duplicated instead of using a new ID for the new activity. This could provide unintended access to the original meeting.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2023-5548
  - CVSS Score: N/A
  - Description: Stronger revision number limitations were required on file serving endpoints to improve cache poisoning protection.
- Vulnerability: CVE-2023-5549
  - CVSS Score: N/A
  - Description: Insufficient web service capability checks made it possible to move categories a user had permission to manage, to a parent category they did not have the capability to manage.
- Vulnerability: CVE-2023-23921
  - CVSS Score: N/A

  - Description: The vulnerability was found Moodle which exists due to insufficient sanitization of user-supplied data in some returnurl parameters. A remote attacker can trick the victim to follow a specially crafted link and execute arbitrary HTML and script code in user's browser in context of vulnerable website. This flaw allows a remote attacker to perform cross-site scripting (XSS) attacks.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2023-28333
  - CVSS Score: N/A
  - Description: The Mustache pix helper contained a potential Mustache injection risk if combined with user input (note: This did not appear to be implemented/exploitable anywhere in the core Moodle LMS).

- Vulnerability: CVE-2023-28332
  - CVSS Score: N/A
  - Description: If the algebra filter was enabled but not functional (eg the necessary binaries were missing from the server), it presented an XSS risk.

- Vulnerability: CVE-2024-38276
  - CVSS Score: N/A
  - Description: Incorrect CSRF token checks resulted in multiple CSRF risks.

- Vulnerability: CVE-2023-28330
  - CVSS Score: N/A
  - Description: Insufficient sanitizing in backup resulted in an arbitrary file read risk. The capability to access this feature is only available to teachers, managers and admins by default.

- Vulnerability: CVE-2023-28331
  - CVSS Score: N/A
  - Description: Content output by the database auto-linking filter required additional sanitizing to prevent an XSS risk.

- Vulnerability: CVE-2023-28335

  - CVSS Score: N/A
  - Description: The link to reset all templates of a database activity did not include the necessary token to prevent a CSRF risk.

- Vulnerability: CVE-2023-28334
  - CVSS Score: N/A
  - Description: Authenticated users were able to enumerate other users' names via the learning plans page.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2023-30944
  - CVSS Score: N/A
  - Description: The vulnerability was found Moodle which exists due to insufficient sanitization of user-supplied data in external Wiki method for listing pages. A remote attacker can send a specially crafted request to the affected application and execute limited SQL commands within the application database.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2023-30943
  - CVSS Score: N/A
  - Description: The vulnerability was found Moodle which exists because the application allows a user to control path of the older to create in TinyMCE loaders. A remote user can send a specially crafted HTTP request and create arbitrary folders on the system.

- Vulnerability: CVE-2023-28336
  - CVSS Score: N/A
  - Description: Insufficient filtering of grade report history made it possible for teachers to access the names of users they could not otherwise access.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2024-34008

  - CVSS Score: N/A
  - Description: Actions in the admin management of analytics models did not include the necessary token to prevent a CSRF risk.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2023-35133
  - CVSS Score: N/A
  - Description: An issue in the logic used to check 0.0.0.0 against the cURL blocked hosts lists resulted in an SSRF risk. This flaw affects Moodle versions 4.2, 4.1 to 4.1.3, 4.0 to 4.0.8, 3.11 to 3.11.14, 3.9 to 3.9.21 and earlier unsupported versions.

- Vulnerability: CVE-2023-35132
  - CVSS Score: N/A
  - Description: A limited SQL injection risk was identified on the Mnet SSO access control page. This flaw affects Moodle versions 4.2, 4.1 to 4.1.3, 4.0 to 4.0.8, 3.11 to 3.11.14, 3.9 to 3.9.21 and earlier unsupported versions.

- Vulnerability: CVE-2023-35131
  - CVSS Score: N/A
  - Description: Content on the groups page required additional sanitizing to prevent an XSS risk. This flaw affects Moodle versions 4.2, 4.1 to 4.1.3, 4.0 to 4.0.8 and 3.11 to 3.11.14.

- Vulnerability: CVE-2023-1402
  - CVSS Score: N/A
  - Description: The course participation report required additional checks to prevent roles being displayed which the user did not have access to view.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2012-4360

  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2023-5539
  - CVSS Score: N/A
  - Description: A remote code execution risk was identified in the Lesson activity. By default this was only available to teachers and managers.
- Vulnerability: CVE-2023-23923
  - CVSS Score: N/A
  - Description: The vulnerability was found Moodle which exists due to insufficient limitations on the "start page" preference. A remote attacker can set that preference for another user. The vulnerability allows a remote attacker to gain unauthorized access to otherwise restricted functionality.
- Vulnerability: CVE-2023-5551
  - CVSS Score: N/A
  - Description: Separate Groups mode restrictions were not honoured in the forum summary report, which would display users from other groups.
- Vulnerability: CVE-2023-5550
  - CVSS Score: N/A
  - Description: In a shared hosting environment that has been misconfigured to allow access to other users' content, a Moodle user who also has direct access to the web server outside of the Moodle webroot could utilise a local file include to achieve remote code execution.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2007-6538
  - CVSS Score: 7.5

  - Description: SQL injection vulnerability in ing/blocks/mrbs/code/web/view_entry.php in the MRBS plugin for Moodle allows remote attackers to execute arbitrary SQL commands via the id parameter.

- Vulnerability: CVE-2023-23922
  - CVSS Score: N/A
  - Description: The vulnerability was found Moodle which exists due to insufficient sanitization of user-supplied data in blog search. A remote attacker can trick the victim to follow a specially crafted link and execute arbitrary HTML and script code in user's browser in context of vulnerable website. This flaw allows a remote attacker to perform cross-site scripting (XSS) attacks.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2023-28329
  - CVSS Score: N/A
  - Description: Insufficient validation of profile field availability condition resulted in an SQL injection risk (by default only available to teachers and managers).

- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2010-4208
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the Flash component infrastructure in YUI 2.5.0 through 2.8.1, as used in Bugzilla, Moodle, and other products, allows remote attackers to inject arbitrary web script or HTML via vectors related to uploader/assets/uploader.swf.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2010-4207
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the Flash component infrastructure in YUI 2.4.0 through 2.8.1, as used in Bugzilla, Moodle, and other products, allows remote attackers to inject arbitrary web script or HTML via vectors related to charts/assets/charts.swf.
- Vulnerability: CVE-2023-45802

  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5

  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

11.90 IP Address: 159.149.119.18

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 13
- Medium Vulnerabilities: 81
- Low Vulnerabilities: 7
- Total Vulnerabilities: 102

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.2.26
  - Location: /
- Service: Heimdal Kerberos
  - Port: 88
  - Version: N/A
  - Location:
- Service: Apple remote desktop vnc
  - Port: 5900
  - Version: N/A
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2012-0027
  - CVSS Score: 5
  - Description: The GOST ENGINE in OpenSSL before 1.0.0f does not properly handle invalid parameters for the GOST block cipher, which allows remote attackers to cause a denial of service (daemon crash) via crafted data from a TLS client.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2016-2176
  - CVSS Score: 6.4
  - Description: The X509_NAME_oneline function in crypto/x509/x509_obj.c in OpenSSL before 1.0.1t and 1.0.2 before 1.0.2h allows remote attackers to obtain sensitive information from process stack memory or cause a denial of service (buffer over-read) via crafted EBCDIC ASN.1 data.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2011-4108
  - CVSS Score: 4.3
  - Description: The DTLS implementation in OpenSSL before 0.9.8s and 1.x before 1.0.0f performs a MAC check only if certain padding is valid, which makes it easier for remote attackers to recover plaintext via a padding oracle attack.

- Vulnerability: CVE-2010-4252
  - CVSS Score: 7.5
  - Description: OpenSSL before 1.0.0c, when J-PAKE is enabled, does not properly validate the public parameters in the J-PAKE protocol, which allows remote attackers to bypass the need for knowledge of the shared secret, and successfully authenticate, by sending crafted values in each round of the protocol.

- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-0703
  - CVSS Score: 4.3
  - Description: The get_client_master_key function in s2_srvr.c in the SSLv2 implementation in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a accepts a nonzero CLIENT-MASTER-KEY CLEAR-KEY-LENGTH value for an arbitrary cipher, which allows man-in-the-middle attackers to determine the MASTER-KEY value and decrypt TLS ciphertext data by leveraging a Bleichenbacher RSA padding oracle, a related issue to CVE-2016-0800.
- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2015-3195
  - CVSS Score: 5
  - Description: The ASN1_TFLG_COMBINE implementation in crypto/asn1/tasn_dec.c in OpenSSL before 0.9.8zh, 1.0.0 before 1.0.0t, 1.0.1 before 1.0.1q, and 1.0.2 before 1.0.2e mishandles errors caused by malformed X509_ATTRIBUTE data, which allows remote attackers to obtain sensitive information from process memory by triggering a decoding failure in a PKCS#7 or CMS application.
- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.
- Vulnerability: CVE-2021-4044
  - CVSS Score: 5
  - Description: Internally libssl in OpenSSL calls X509_verify_cert() on the client side to verify a certificate supplied by a server. That function may return a negative return value to indicate an internal error (for example out of memory). Such a negative return value is mishandled by OpenSSL and will cause an IO function (such as SSL_connect() or SSL_do_handshake()) to not indicate success and a subsequent call to SSL_get_error() to return the value SSL_ERROR_WANT_RETRY_VERIFY. This return value is only supposed to be returned by OpenSSL if the application has previously called SSL_CTX_set_cert_verify_callback(). Since most applications do not do this the SSL_ERROR_WANT_RETRY_VERIFY return value from SSL_get_error() will be totally unexpected and applications may not behave correctly as a result. The exact behaviour will depend on the application but it could result in crashes, infinite loops or other similar incorrect responses. This issue is made more serious in combination with a separate bug in OpenSSL 3.0 that will cause X509_verify_cert() to indicate an internal error when processing a certificate chain. This will occur where a certificate does not include the Subject Alternative Name extension but where a Certificate Authority has enforced name constraints. This issue can occur even with valid chains. By combining the two issues an attacker could induce incorrect, application dependent behaviour. Fixed in OpenSSL 3.0.1 (Affected 3.0.0).

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2017-3169
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_ssl may dereference a NULL pointer when third-party modules call ap_hook_process_connection() during an HTTP request to an HTTPS port.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2016-2109
  - CVSS Score: 7.8
  - Description: The asn1_d2i_read_bio function in crypto/asn1/a_d2i_fp.c in the ASN.1 BIO implementation in OpenSSL before 1.0.1t and 1.0.2 before 1.0.2h allows remote attackers to cause a denial of service (memory consumption) via a short invalid encoding.
- Vulnerability: CVE-2016-2108
  - CVSS Score: 10
  - Description: The ASN.1 implementation in OpenSSL before 1.0.1o and 1.0.2 before 1.0.2c allows remote attackers to execute arbitrary code or cause a denial of service (buffer underflow and memory corruption) via an ANY field in crafted serialized data, aka the "negative zero" issue.
- Vulnerability: CVE-2016-2107
  - CVSS Score: 2.6

  - Description: The AES-NI implementation in OpenSSL before 1.0.1t and 1.0.2 before 1.0.2h does not consider memory allocation during a certain padding check, which allows remote attackers to obtain sensitive cleartext information via a padding-oracle attack against an AES CBC session. NOTE: this vulnerability exists because of an incorrect fix for CVE-2013-0169.

- Vulnerability: CVE-2016-2106
  - CVSS Score: 5
  - Description: Integer overflow in the EVP_EncryptUpdate function in crypto/evp/evp_enc.c in OpenSSL before 1.0.1t and 1.0.2 before 1.0.2h allows remote attackers to cause a denial of service (heap memory corruption) via a large amount of data.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3

  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2015-0287
  - CVSS Score: 5
  - Description: The ASN1_item_ex_d2i function in crypto/asn1/tasn_dec.c in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a does not reinitialize CHOICE and ADB data structures, which might allow attackers to cause a denial of service (invalid write operation and memory corruption) by leveraging an application that relies on ASN.1 structure reuse.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2010-5298
  - CVSS Score: 4
  - Description: Race condition in the ssl3_read_bytes function in s3_pkt.c in OpenSSL through 1.0.1g, when SSL_MODE_RELEASE_BUFFERS is enabled, allows remote attackers to inject data across sessions or cause a denial of service (use-after-free and parsing error) via an SSL connection in a multithreaded environment.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2014-3510
  - CVSS Score: 4.3
  - Description: The ssl3_send_client_key_exchange function in s3_clnt.c in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1i allows remote DTLS servers to cause a denial of service (NULL pointer dereference and client application crash) via a crafted handshake message in conjunction with a (1) anonymous DH or (2) anonymous ECDH ciphersuite.
- Vulnerability: CVE-2014-8275
  - CVSS Score: 5
  - Description: OpenSSL before 0.9.8zd, 1.0.0 before 1.0.0p, and 1.0.1 before 1.0.1k does not enforce certain constraints on certificate data, which allows remote attackers to defeat a fingerprint-based certificate-blacklist protection mechanism by including crafted data within a certificate's unsigned portion, related to crypto/asn1/a_verify.c, crypto/dsa/dsa_asn1.c, crypto/ecdsa/ecs_vrf.c, and crypto/x509/x_all.c.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5

  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-4577
  - CVSS Score: 4.3
  - Description: OpenSSL before 0.9.8s and 1.x before 1.0.0f, when RFC 3779 support is enabled, allows remote attackers to cause a denial of service (assertion failure) via an X.509 certificate containing certificate-extension data associated with (1) IP address blocks or (2) Autonomous System (AS) identifiers.

- Vulnerability: CVE-2011-4576
  - CVSS Score: 5
  - Description: The SSL 3.0 implementation in OpenSSL before 0.9.8s and 1.x before 1.0.0f does not properly initialize data structures for block cipher padding, which might allow remote attackers to obtain sensitive information by decrypting the padding data sent by an SSL peer.

- Vulnerability: CVE-2011-1945
  - CVSS Score: 2.6
  - Description: The elliptic curve cryptography (ECC) subsystem in OpenSSL 1.0.0d and earlier, when the Elliptic Curve Digital Signature Algorithm (ECDSA) is used for the ECDHE_ECDSA cipher suite, does not properly implement curves over binary fields, which makes it easier for context-dependent attackers to determine private keys via a timing attack and a lattice calculation.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2014-3505
  - CVSS Score: 5
  - Description: Double free vulnerability in d1_both.c in the DTLS implementation in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1i allows remote attackers to cause a denial of service (application crash) via crafted DTLS packets that trigger an error condition.

- Vulnerability: CVE-2014-3506

  - CVSS Score: 5
  - Description: d1_both.c in the DTLS implementation in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1i allows remote attackers to cause a denial of service (memory consumption) via crafted DTLS handshake messages that trigger memory allocations corresponding to large length values.

- Vulnerability: CVE-2014-3507
  - CVSS Score: 5
  - Description: Memory leak in d1_both.c in the DTLS implementation in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1i allows remote attackers to cause a denial of service (memory consumption) via zero-length DTLS fragments that trigger improper handling of the return value of a certain insert function.
- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8
  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2014-3508
  - CVSS Score: 4.3

  - Description: The OBJ_obj2txt function in crypto/objects/obj_dat.c in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1i, when pretty printing is used, does not ensure the presence of '\{}0' characters, which allows context-dependent attackers to obtain sensitive information from process stack memory by reading output from X509_name_oneline, X509_name_print_ex, and unspecified other functions.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2015-4000
  - CVSS Score: 4.3
  - Description: The TLS protocol 1.2 and earlier, when a DHE_EXPORT ciphersuite is enabled on a server but not on a client, does not properly convey a DHE_EXPORT choice, which allows man-in-the-middle attackers to conduct cipher-downgrade attacks by rewriting a ClientHello with DHE replaced by DHE_EXPORT and then rewriting a ServerHello with DHE_EXPORT replaced by DHE, aka the "Logjam" issue.

- Vulnerability: CVE-2016-5387
  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2015-0209

  - CVSS Score: 6.8
  - Description: Use-after-free vulnerability in the d2i_ECPrivateKey function in crypto/ec/ec_asn1.c in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a might allow remote attackers to cause a denial of service (memory corruption and application crash) or possibly have unspecified other impact via a malformed Elliptic Curve (EC) private-key file that is improperly handled during import.

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.

- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.

- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.

- Vulnerability: CVE-2015-0204
  - CVSS Score: 4.3
  - Description: The ssl3_get_key_exchange function in s3_clnt.c in OpenSSL before 0.9.8zd, 1.0.0 before 1.0.0p, and 1.0.1 before 1.0.1k allows remote SSL servers to conduct RSA-to-EXPORT_RSA downgrade attacks and facilitate brute-force decryption by offering a weak ephemeral RSA key in a noncompliant role, related to the "FREAK" issue. NOTE: the scope of this CVE is only client code based on OpenSSL, not EXPORT_RSA issues associated with servers or other TLS implementations.

- Vulnerability: CVE-2014-3571
  - CVSS Score: 5
  - Description: OpenSSL before 0.9.8zd, 1.0.0 before 1.0.0p, and 1.0.1 before 1.0.1k allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a crafted DTLS message that is processed with a different read operation for the handshake header than for the handshake body, related to the dtls1_get_record function in d1_pkt.c and the ssl3_read_n function in s3_pkt.c.

- Vulnerability: CVE-2014-3570

  - CVSS Score: 5
  - Description: The BN_sqr implementation in OpenSSL before 0.9.8zd, 1.0.0 before 1.0.0p, and 1.0.1 before 1.0.1k does not properly calculate the square of a BIGNUM value, which might make it easier for remote attackers to defeat cryptographic protection mechanisms via unspecified vectors, related to crypto/bn/asm/mips.pl, crypto/bn/asm/x86_64-gcc.c, and crypto/bn/bn_asm.c.

- Vulnerability: CVE-2014-3572
  - CVSS Score: 5
  - Description: The ssl3_get_key_exchange function in s3_clnt.c in OpenSSL before 0.9.8zd, 1.0.0 before 1.0.0p, and 1.0.1 before 1.0.1k allows remote SSL servers to conduct ECDHE-to-ECDH downgrade attacks and trigger a loss of forward secrecy by omitting the ServerKeyExchange message.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2015-0286
  - CVSS Score: 5
  - Description: The ASN1_TYPE_cmp function in crypto/asn1/a_type.c in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a does not properly perform boolean-type comparisons, which allows remote attackers to cause a denial of service (invalid read operation and application crash) via a crafted X.509 certificate to an endpoint that uses the certificate-verification feature.

- Vulnerability: CVE-2015-0289
  - CVSS Score: 5
  - Description: The PKCS#7 implementation in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a does not properly handle a lack of outer ContentInfo, which allows attackers to cause a denial of service (NULL pointer dereference and application crash) by leveraging an application that processes arbitrary PKCS#7 data and providing malformed data with ASN.1 encoding, related to crypto/pkcs7/pk7_doit.c and crypto/pkcs7/pk7_lib.c.

- Vulnerability: CVE-2015-0288
  - CVSS Score: 5
  - Description: The X509_to_X509_REQ function in crypto/x509/x509_req.c in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a might allow attackers to cause a denial of service (NULL pointer dereference and application crash) via an invalid certificate key.
- Vulnerability: CVE-2016-7056
  - CVSS Score: 2.1
  - Description: A timing attack flaw was found in OpenSSL 1.0.1u and before that could allow a malicious user with local access to recover ECDSA P-256 private keys.
- Vulnerability: CVE-2014-0076
  - CVSS Score: 1.9
  - Description: The Montgomery ladder implementation in OpenSSL through 1.0.0l does not ensure that certain swap operations have a constant-time behavior, which makes it easier for local users to obtain ECDSA nonces via a FLUSH+RELOAD cache side-channel attack.
- Vulnerability: CVE-2015-1789
  - CVSS Score: 4.3
  - Description: The X509_cmp_time function in crypto/x509/x509_vfy.c in OpenSSL before 0.9.8zg, 1.0.0 before 1.0.0s, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b allows remote attackers to cause a denial of service (out-of-bounds read and application crash) via a crafted length field in ASN1_TIME data, as demonstrated by an attack against a server that supports client authentication with a custom verification callback.
- Vulnerability: CVE-2015-1788
  - CVSS Score: 4.3
  - Description: The BN_GF2m_mod_inv function in crypto/bn/bn_gf2m.c in OpenSSL before 0.9.8s, 1.0.0 before 1.0.0e, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b does not properly handle ECParameters structures in which the curve is over a malformed binary polynomial field, which allows remote attackers to cause a denial of service (infinite loop) via a session that uses an Elliptic Curve algorithm, as demonstrated by an attack against a server that supports client authentication.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2014-3566

  - CVSS Score: 4.3
  - Description: The SSL protocol 3.0, as used in OpenSSL through 1.0.1i and other products, uses nondeterministic CBC padding, which makes it easier for man-in-the-middle attackers to obtain cleartext data via a padding-oracle attack, aka the "POODLE" issue.

- Vulnerability: CVE-2014-3567
  - CVSS Score: 7.1
  - Description: Memory leak in the tls_decrypt_ticket function in t1_lib.c in OpenSSL before 0.9.8zc, 1.0.0 before 1.0.0o, and 1.0.1 before 1.0.1j allows remote attackers to cause a denial of service (memory consumption) via a crafted session ticket that triggers an integrity-check failure.
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2014-3568
  - CVSS Score: 4.3
  - Description: OpenSSL before 0.9.8zc, 1.0.0 before 1.0.0o, and 1.0.1 before 1.0.1j does not properly enforce the no-ssl3 build option, which allows remote attackers to bypass intended access restrictions via an SSL 3.0 handshake, related to s23_clnt.c and s23_srvr.c.
- Vulnerability: CVE-2015-0293
  - CVSS Score: 5
  - Description: The SSLv2 implementation in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a allows remote attackers to cause a denial of service (s2_lib.c assertion failure and daemon exit) via a crafted CLIENT-MASTER-KEY message.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2015-1790
  - CVSS Score: 5
  - Description: The PKCS7_dataDecodefunction in crypto/pkcs7/pk7_doit.c in OpenSSL before 0.9.8zg, 1.0.0 before 1.0.0s, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a PKCS#7 blob that uses ASN.1 encoding and lacks inner EncryptedContent data.
- Vulnerability: CVE-2015-1791
  - CVSS Score: 6.8
  - Description: Race condition in the ssl3_get_new_session_ticket function in ssl/s3_clnt.c in OpenSSL before 0.9.8zg, 1.0.0 before 1.0.0s, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b, when used for a multi-threaded client, allows remote attackers to cause a denial of service (double free and application crash) or possibly have unspecified other impact by providing a NewSessionTicket during an attempt to reuse a ticket that had been obtained earlier.
- Vulnerability: CVE-2015-1792
  - CVSS Score: 5
  - Description: The do_free_upto function in crypto/cms/cms_smime.c in OpenSSL before 0.9.8zg, 1.0.0 before 1.0.0s, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b allows remote attackers to cause a denial of service (infinite loop) via vectors that trigger a NULL value of a BIO data structure, as demonstrated by an unrecognized X.660 OID for a hash function.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2011-4619
  - CVSS Score: 5
  - Description: The Server Gated Cryptography (SGC) implementation in OpenSSL before 0.9.8s and 1.x before 1.0.0f does not properly handle handshake restarts, which allows remote attackers to cause a denial of service (CPU consumption) via unspecified vectors.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1

  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2013-6449
  - CVSS Score: 4.3
  - Description: The ssl_get_algorithm2 function in ssl/s3_lib.c in OpenSSL before 1.0.2 obtains a certain version number from an incorrect data structure, which allows remote attackers to cause a denial of service (daemon crash) via crafted traffic from a TLS 1.2 client.
- Vulnerability: CVE-2020-7042
  - CVSS Score: 5
  - Description: An issue was discovered in openfortivpn 1.11.0 when used with OpenSSL 1.0.2 or later. tunnel.c mishandles certificate validation because the hostname check operates on uninitialized memory. The outcome is that a valid certificate is never accepted (only a malformed certificate may be accepted).
- Vulnerability: CVE-2020-7043
  - CVSS Score: 6.4
  - Description: An issue was discovered in openfortivpn 1.11.0 when used with OpenSSL before 1.0.2. tunnel.c mishandles certificate validation because hostname comparisons do not consider '\{}0' characters, as demonstrated by a good.example.com\{}x00evil.example.com attack.
- Vulnerability: CVE-2020-7041
  - CVSS Score: 5
  - Description: An issue was discovered in openfortivpn 1.11.0 when used with OpenSSL 1.0.2 or later. tunnel.c mishandles certificate validation because an X509_check_host negative error code is interpreted as a successful return value.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2016-0704
  - CVSS Score: 4.3
  - Description: An oracle protection mechanism in the get_client_master_key function in s2_srvr.c in the SSLv2 implementation in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a overwrites incorrect MASTER-KEY bytes during use of export cipher suites, which makes it easier for remote attackers to decrypt TLS ciphertext data by leveraging a Bleichenbacher RSA padding oracle, a related issue to CVE-2016-0800.

11.91 IP Address: 159.149.53.34

- Organization: UNI-Milano
- Operating System: Windows
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: Microsoft IIS httpd
  - Port: 443
  - Version: 10.0
  - Location: https://cas.unimi.it/login?service=https%3a%2f%2fpresenze.unimi.it%2fStartWeb%

No vulnerabilities found for this IP address.

11.92 IP Address: 159.149.136.4

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 7
- Medium Vulnerabilities: 26
- Low Vulnerabilities: 4
- Total Vulnerabilities: 38

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 9.0
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.58
  - Location: https://xorshift.di.unimi.it/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.58
  - Location: http://prng.di.unimi.it/
- Service: N/A
  - Port: 993
  - Version: N/A
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.
- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A

  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.

- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A
  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.

- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.

- Vulnerability: CVE-2023-28531

  - CVSS Score: N/A
  - Description: ssh-add in OpenSSH before 9.3 adds smartcard keys to ssh-agent without the intended per-hop destination constraints. The earliest affected version is 8.9.

- Vulnerability: CVE-2023-51384
  - CVSS Score: N/A
  - Description: In ssh-agent in OpenSSH before 9.6, certain destination constraints can be incompletely applied. When destination constraints are specified during addition of PKCS#11-hosted private keys, these constraints are only applied to the first key, even if a PKCS#11 token returns multiple keys.

- Vulnerability: CVE-2023-51385
  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.

- Vulnerability: CVE-2024-6387
  - CVSS Score: N/A
  - Description: A security regression (CVE-2006-5051) was discovered in OpenSSH's server (sshd). There is a race condition which can lead sshd to handle some signals in an unsafe manner. An unauthenticated, remote attacker may be able to trigger it by failing to authenticate within a set time period.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5

  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38474

  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5

  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2023-6129
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications runningon PowerPC CPU based platforms if the CPU provides vector instructions.Impact summary: If an attacker can influence whether the POLY1305 MACalgorithm is used, the application state might be corrupted with variousapplication dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL forPowerPC CPUs restores the contents of vector registers in a different orderthan they are saved. Thus the contents of some of these vector registersare corrupted when returning to the caller. The vulnerable code is used onlyon newer PowerPC processors supporting the PowerISA 2.07 instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However unless the compiler uses the vector registers for storingpointers, the most likely consequence, if any, would be an incorrect resultof some application dependent calculations or a crash leading to a denial ofservice.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3. If this cipher is enabled on the server a maliciousclient can influence whether this AEAD cipher is used. This implies thatTLS server applications using OpenSSL can be potentially impacted. Howeverwe are currently not aware of any concrete application that would be affectedby this issue therefore we consider this a Low severity security issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5

  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2023-2975
  - CVSS Score: N/A
  - Description: Issue summary: The AES-SIV cipher implementation contains a bug that causesit to ignore empty associated data entries which are unauthenticated asa consequence.Impact summary: Applications that use the AES-SIV algorithm and want toauthenticate empty data entries as associated data can be mislead by removingadding or reordering such empty entries as these are ignored by the OpenSSLimplementation. We are currently unaware of any such applications.The AES-SIV algorithm allows for authentication of multiple associateddata entries along with the encryption. To authenticate empty data theapplication has to call EVP_EncryptUpdate() (or EVP_CipherUpdate()) withNULL pointer as the output buffer and 0 as the input buffer length.The AES-SIV implementation in OpenSSL just returns success for such a callinstead of performing the associated data authentication operation.The empty data thus will not be authenticated.As this issue does not affect non-empty associated data authentication andwe expect it to be rare for an application to use empty associated dataentries this is qualified as Low severity issue.

- Vulnerability: CVE-2023-5363
  - CVSS Score: N/A
  - Description: Issue summary: A bug has been identified in the processing of key andinitialisation vector (IV) lengths. This can lead to potential truncationor overruns during the initialisation of some symmetric ciphers.Impact summary: A truncation in the IV can result in non-uniqueness,which could result in loss of confidentiality for some cipher modes.When calling EVP_EncryptInit_ex2(), EVP_DecryptInit_ex2() orEVP_CipherInit_ex2() the provided OSSL_PARAM array is processed afterthe key and IV have been established. Any alterations to the key length,via the "keylen" parameter or the IV length, via the "ivlen" parameter,within the OSSL_PARAM array will not take effect as intended, potentiallycausing truncation or overreading of these values. The following ciphersand cipher modes are impacted: RC2, RC4, RC5, CCM, GCM and OCB.For the CCM, GCM and OCB cipher modes, truncation of the IV can result inloss of confidentiality. For example, when following NIST's SP 800-38Dsection 8.2.1 guidance for constructing a deterministic IV for AES inGCM mode, truncation of the counter portion could lead to IV reuse.Both truncations and overruns of the key and overruns of the IV willproduce incorrect results and could, in some cases, trigger a memoryexception. However, these issues are not currently assessed as securitycritical.Changing the key and/or IV lengths is not considered to be a common operationand the vulnerable API was recently introduced. Furthermore it is likely thatapplication developers will have spotted this problem during testing sincedecryption would fail unless both peers in the communication were similarlyvulnerable. For these reasons we expect the probability of an application beingvulnerable to this to be quite low. However if an application is vulnerable thenthis issue is considered very serious. For these reasons we have assessed thisissue as Moderate severity overall.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this becausethe issue lies outside of the FIPS provider boundary.OpenSSL 3.1 and 3.0 are vulnerable to this issue.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2024-4577
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.
- Vulnerability: CVE-2024-5458
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, due to a code logic error, filtering functions such as filter_var when validating URLs(FILTER_VALIDATE_URL) for certain types of URLs the function will result in invalid user information (username + password part of URLs) being treated as valid user information. This may lead to the downstream code accepting invalid URLs as valid and parsing them incorrectly.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8

  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2023-6129
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications runningon PowerPC CPU based platforms if the CPU provides vector instructions.Impact summary: If an attacker can influence whether the POLY1305 MACalgorithm is used, the application state might be corrupted with variousapplication dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL forPowerPC CPUs restores the contents of vector registers in a different orderthan they are saved. Thus the contents of some of these vector registersare corrupted when returning to the caller. The vulnerable code is used onlyon newer PowerPC processors supporting the PowerISA 2.07 instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However unless the compiler uses the vector registers for storingpointers, the most likely consequence, if any, would be an incorrect resultof some application dependent calculations or a crash leading to a denial ofservice.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3. If this cipher is enabled on the server a maliciousclient can influence whether this AEAD cipher is used. This implies thatTLS server applications using OpenSSL can be potentially impacted. Howeverwe are currently not aware of any concrete application that would be affectedby this issue therefore we consider this a Low severity security issue.

- Vulnerability: CVE-2024-2408
  - CVSS Score: N/A
  - Description: The openssl_private_decrypt function in PHP, when using PKCS1 padding (OPENSSL_PKCS1_PADDING, which is the default), is vulnerable to the Marvin Attack unless it is used with an OpenSSL version that includes the changes from this pull request: https://github.com/openssl/openssl/pull/13817 (rsa_pkcs1_implicit_rejection). These changes are part of OpenSSL 3.2 and have also been backported to stable versions of various Linux distributions, as well as to the PHP builds provided for Windows since the previous release. All distributors and builders should ensure that this version is used to prevent PHP from being vulnerable.PHP Windows builds for the versions8.1.29,8.2.20 and8.3.8 and above include OpenSSL patches that fix the vulnerability.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3

  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2024-5585
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, the fix forCVE-2024-1874 does not work if the command name includes trailing spaces. Original issue:when using proc_open() command with array syntax, due to insufficient escaping, if the arguments of the executed command are controlled by a malicious user, the user can supply arguments that would execute arbitrary commands in Windows shell.

- Vulnerability: CVE-2023-2975
  - CVSS Score: N/A
  - Description: Issue summary: The AES-SIV cipher implementation contains a bug that causesit to ignore empty associated data entries which are unauthenticated asa consequence.Impact summary: Applications that use the AES-SIV algorithm and want toauthenticate empty data entries as associated data can be mislead by removingadding or reordering such empty entries as these are ignored by the OpenSSLimplementation. We are currently unaware of any such applications.The AES-SIV algorithm allows for authentication of multiple associateddata entries along with the encryption. To authenticate empty data theapplication has to call EVP_EncryptUpdate() (or EVP_CipherUpdate()) withNULL pointer as the output buffer and 0 as the input buffer length.The AES-SIV implementation in OpenSSL just returns success for such a callinstead of performing the associated data authentication operation.The empty data thus will not be authenticated.As this issue does not affect non-empty associated data authentication andwe expect it to be rare for an application to use empty associated dataentries this is qualified as Low severity issue.
- Vulnerability: CVE-2023-5363
  - CVSS Score: N/A
  - Description: Issue summary: A bug has been identified in the processing of key andinitialisation vector (IV) lengths. This can lead to potential truncationor overruns during the initialisation of some symmetric ciphers.Impact summary: A truncation in the IV can result in non-uniqueness,which could result in loss of confidentiality for some cipher modes.When calling EVP_EncryptInit_ex2(), EVP_DecryptInit_ex2() orEVP_CipherInit_ex2() the provided OSSL_PARAM array is processed afterthe key and IV have been established. Any alterations to the key length,via the "keylen" parameter or the IV length, via the "ivlen" parameter,within the OSSL_PARAM array will not take effect as intended, potentiallycausing truncation or overreading of these values. The following ciphersand cipher modes are impacted: RC2, RC4, RC5, CCM, GCM and OCB.For the CCM, GCM and OCB cipher modes, truncation of the IV can result inloss of confidentiality. For example, when following NIST's SP 800-38Dsection 8.2.1 guidance for constructing a deterministic IV for AES inGCM mode, truncation of the counter portion could lead to IV reuse.Both truncations and overruns of the key and overruns of the IV willproduce incorrect results and could, in some cases, trigger a memoryexception. However, these issues are not currently assessed as securitycritical.Changing the key and/or IV lengths is not considered to be a common operationand the vulnerable API was recently introduced. Furthermore it is likely thatapplication developers will have spotted this problem during testing sincedecryption would fail unless both peers in the communication were similarlyvulnerable. For these reasons we expect the probability of an application beingvulnerable to this to be quite low. However if an application is vulnerable thenthis issue is considered very serious. For these reasons we have assessed thisissue as Moderate severity overall.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this becausethe issue lies outside of the FIPS provider boundary.OpenSSL 3.1 and 3.0 are vulnerable to this issue.

11.93 IP Address: 159.149.145.2

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 4
- Medium Vulnerabilities: 16
- Low Vulnerabilities: 1
- Total Vulnerabilities: 22

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.0
  - Location:
- Service: nginx
  - Port: 80
  - Version: 1.14.1
  - Location: /
- Service: nginx
  - Port: 443
  - Version: 1.14.1
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2019-16905
  - CVSS Score: 4.4
  - Description: OpenSSH 7.7 through 7.9 and 8.x before 8.1, when compiled with an experimental key type, has a pre-authentication integer overflow if a client or server is configured to use a crafted XMSS key. This leads to memory corruption and local code execution because of an error in the XMSS key parsing algorithm. NOTE: the XMSS implementation is considered experimental in all released OpenSSH versions, and there is no supported way to enable it when building portable OpenSSH.
- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6

  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.

- Vulnerability: CVE-2020-14145
  - CVSS Score: 4.3
  - Description: The client side in OpenSSH 5.7 through 8.4 has an Observable Discrepancy leading to an information leak in the algorithm negotiation. This allows man-in-the-middle attackers to target initial connection attempts (where no host key for the server has been cached by the client). NOTE: some reports state that 8.5 and 8.6 are also affected.
- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.
- Vulnerability: CVE-2020-15778
  - CVSS Score: 6.8
  - Description: scp in OpenSSH through 8.3p1 allows command injection in the scp.c toremote function, as demonstrated by backtick characters in the destination argument. NOTE: the vendor reportedly has stated that they intentionally omit validation of "anomalous argument transfers" because that could "stand a great chance of breaking existing workflows."
- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.
- Vulnerability: CVE-2023-51385

  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.
- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.
- Vulnerability: CVE-2023-44487
  - CVSS Score: N/A
  - Description: The HTTP/2 protocol allows a denial of service (server resource consumption) because request cancellation can reset many streams quickly, as exploited in the wild in August through October 2023.
- Vulnerability: CVE-2019-9516
  - CVSS Score: 6.8
  - Description: Some HTTP/2 implementations are vulnerable to a header leak, potentially leading to a denial of service. The attacker sends a stream of headers with a 0-length header name and 0-length header value, optionally Huffman encoded into 1-byte or greater headers. Some implementations allocate memory for these headers and keep the allocation alive until the session dies. This can consume excess memory.
- Vulnerability: CVE-2019-9513
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to resource loops, potentially leading to a denial of service. The attacker creates multiple request streams and continually shuffles the priority of the streams in a way that causes substantial churn to the priority tree. This can consume excess CPU.
- Vulnerability: CVE-2019-9511
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to window size manipulation and stream prioritization manipulation, potentially leading to a denial of service. The attacker requests a large amount of data from a specified resource over multiple streams. They manipulate window size and stream priority to force the server to queue the data in 1-byte chunks. Depending on how efficiently this data is queued, this can consume excess CPU, memory, or both.
- Vulnerability: CVE-2021-23017
  - CVSS Score: 6.8

  - Description: A security issue in nginx resolver was identified, which might allow an attacker who is able to forge UDP packets from the DNS server to cause 1-byte memory overwrite, resulting in worker process crash or potential other impact.

- Vulnerability: CVE-2021-3618
  - CVSS Score: 5.8
  - Description: ALPACA is an application layer protocol content confusion attack, exploiting TLS servers implementing different protocols but using compatible certificates, such as multi-domain or wildcard certificates. A MiTM attacker having access to victim's traffic at the TCP/IP layer can redirect traffic from one subdomain to another, resulting in a valid TLS session. This breaks the authentication of TLS and cross-protocol attacks may be possible where the behavior of one protocol service may compromise the other at the application layer.

- Vulnerability: CVE-2019-20372
  - CVSS Score: 4.3
  - Description: NGINX before 1.17.7, with certain error_page configurations, allows HTTP request smuggling, as demonstrated by the ability of an attacker to read unauthorized web pages in environments where NGINX is being fronted by a load balancer.

- Vulnerability: CVE-2018-16845
  - CVSS Score: 5.8
  - Description: nginx before versions 1.15.6, 1.14.1 has a vulnerability in the ngx_http_mp4_module, which might allow an attacker to cause infinite loop in a worker process, cause a worker process crash, or might result in worker process memory disclosure by using a specially crafted mp4 file. The issue only affects nginx if it is built with the ngx_http_mp4_module (the module is not built by default) and the .mp4. directive is used in the configuration file. Further, the attack is only possible if an attacker is able to trigger processing of a specially crafted mp4 file with the ngx_http_mp4_module.

- Vulnerability: CVE-2023-44487
  - CVSS Score: N/A
  - Description: The HTTP/2 protocol allows a denial of service (server resource consumption) because request cancellation can reset many streams quickly, as exploited in the wild in August through October 2023.

- Vulnerability: CVE-2019-9516
  - CVSS Score: 6.8
  - Description: Some HTTP/2 implementations are vulnerable to a header leak, potentially leading to a denial of service. The attacker sends a stream of headers with a 0-length header name and 0-length header value, optionally Huffman encoded into 1-byte or greater headers. Some implementations allocate memory for these headers and keep the allocation alive until the session dies. This can consume excess memory.

- Vulnerability: CVE-2019-9513
  - CVSS Score: 7.8

  - Description: Some HTTP/2 implementations are vulnerable to resource loops, potentially leading to a denial of service. The attacker creates multiple request streams and continually shuffles the priority of the streams in a way that causes substantial churn to the priority tree. This can consume excess CPU.

- Vulnerability: CVE-2019-9511
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to window size manipulation and stream prioritization manipulation, potentially leading to a denial of service. The attacker requests a large amount of data from a specified resource over multiple streams. They manipulate window size and stream priority to force the server to queue the data in 1-byte chunks. Depending on how efficiently this data is queued, this can consume excess CPU, memory, or both.

- Vulnerability: CVE-2021-23017
  - CVSS Score: 6.8
  - Description: A security issue in nginx resolver was identified, which might allow an attacker who is able to forge UDP packets from the DNS server to cause 1-byte memory overwrite, resulting in worker process crash or potential other impact.

- Vulnerability: CVE-2021-3618
  - CVSS Score: 5.8
  - Description: ALPACA is an application layer protocol content confusion attack, exploiting TLS servers implementing different protocols but using compatible certificates, such as multi-domain or wildcard certificates. A MiTM attacker having access to victim's traffic at the TCP/IP layer can redirect traffic from one subdomain to another, resulting in a valid TLS session. This breaks the authentication of TLS and cross-protocol attacks may be possible where the behavior of one protocol service may compromise the other at the application layer.

- Vulnerability: CVE-2019-20372
  - CVSS Score: 4.3
  - Description: NGINX before 1.17.7, with certain error_page configurations, allows HTTP request smuggling, as demonstrated by the ability of an attacker to read unauthorized web pages in environments where NGINX is being fronted by a load balancer.

- Vulnerability: CVE-2018-16845
  - CVSS Score: 5.8
  - Description: nginx before versions 1.15.6, 1.14.1 has a vulnerability in the ngx_http_mp4_module, which might allow an attacker to cause infinite loop in a worker process, cause a worker process crash, or might result in worker process memory disclosure by using a specially crafted mp4 file. The issue only affects nginx if it is built with the ngx_http_mp4_module (the module is not built by default) and the .mp4. directive is used in the configuration file. Further, the attack is only possible if an attacker is able to trigger processing of a specially crafted mp4 file with the ngx_http_mp4_module.

11.94 IP Address: 159.149.47.77

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 2
- Low Vulnerabilities: 0
- Total Vulnerabilities: 2

Services Running on IP Address

- Service: nginx
  - Port: 80
  - Version: 1.20.1
  - Location: https://159.149.47.77/

Vulnerabilities Found

- Vulnerability: CVE-2023-44487
  - CVSS Score: N/A
  - Description: The HTTP/2 protocol allows a denial of service (server resource consumption) because request cancellation can reset many streams quickly, as exploited in the wild in August through October 2023.
- Vulnerability: CVE-2021-3618
  - CVSS Score: 5.8
  - Description: ALPACA is an application layer protocol content confusion attack, exploiting TLS servers implementing different protocols but using compatible certificates, such as multi-domain or wildcard certificates. A MiTM attacker having access to victim's traffic at the TCP/IP layer can redirect traffic from one subdomain to another, resulting in a valid TLS session. This breaks the authentication of TLS and cross-protocol attacks may be possible where the behavior of one protocol service may compromise the other at the application layer.
- Vulnerability: CVE-2023-44487
  - CVSS Score: N/A
  - Description: The HTTP/2 protocol allows a denial of service (server resource consumption) because request cancellation can reset many streams quickly, as exploited in the wild in August through October 2023.
- Vulnerability: CVE-2021-3618
  - CVSS Score: 5.8
  - Description: ALPACA is an application layer protocol content confusion attack, exploiting TLS servers implementing different protocols but using compatible certificates, such as multi-domain or wildcard certificates. A MiTM attacker having access to victim's traffic at the TCP/IP layer can redirect traffic from one subdomain to another, resulting in a valid TLS session. This breaks the authentication of TLS and cross-protocol attacks may be possible where the behavior of one protocol service may compromise the other at the application layer.

11.95 IP Address: 159.149.136.3

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 3
- Medium Vulnerabilities: 15
- Low Vulnerabilities: 0
- Total Vulnerabilities: 18

Services Running on IP Address

- Service: nginx
  - Port: 443
  - Version: 1.20.1
  - Location: /
- Service: N/A
  - Port: 8000
  - Version: N/A
  - Location: /
- Service: OpenSSH
  - Port: 8080
  - Version: 9.2p1 Debian 2+deb12u3
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2022-31628
  - CVSS Score: N/A
  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the phar uncompressor code would recursively uncompress "quines" gzip files, resulting in an infinite loop.
- Vulnerability: CVE-2022-31629
  - CVSS Score: N/A
  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the vulnerability enables network and same-site attackers to set a standard insecure cookie in the victim's browser which is treated as a '__Host-' or '__Secure-' cookie by PHP applications.
- Vulnerability: CVE-2022-31626
  - CVSS Score: 6
  - Description: In PHP versions 7.4.x below 7.4.30, 8.0.x below 8.0.20, and 8.1.x below 8.1.7, when pdo_mysql extension with mysqlnd driver, if the third party is allowed to supply host to connect to and the password for the connection, password of excessive length can trigger a buffer overflow in PHP, which can lead to a remote code execution vulnerability.

- Vulnerability: CVE-2022-31625
  - CVSS Score: 6.8
  - Description: In PHP versions 7.4.x below 7.4.30, 8.0.x below 8.0.20, and 8.1.x below 8.1.7, when using Postgres database extension, supplying invalid parameters to the parametrized query may lead to PHP attempting to free memory using uninitialized data as pointers. This could lead to RCE vulnerability or denial of service.
- Vulnerability: CVE-2017-9120
  - CVSS Score: 7.5
  - Description: PHP 7.x through 7.1.5 allows remote attackers to cause a denial of service (buffer overflow and application crash) or possibly have unspecified other impact via a long string because of an Integer overflow in mysqli_real_escape_string.
- Vulnerability: CVE-2024-4577
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.
- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.
- Vulnerability: CVE-2020-7071
  - CVSS Score: 5
  - Description: In PHP versions 7.3.x below 7.3.26, 7.4.x below 7.4.14 and 8.0.0, when validating URL with functions like filter_var($url, FILTER_VALIDATE_URL), PHP will accept an URL with invalid password as valid URL. This may lead to functions that rely on URL being valid to mis-parse the URL and produce wrong data as components of the URL.
- Vulnerability: CVE-2020-7070
  - CVSS Score: 5
  - Description: In PHP versions 7.2.x below 7.2.34, 7.3.x below 7.3.23 and 7.4.x below 7.4.11, when PHP is processing incoming HTTP cookie values, the cookie names are url-decoded. This may lead to cookies with prefixes like __Host confused with cookies that decode to such prefix, thus leading to an attacker being able to forge cookie which is supposed to be secure. See also CVE-2020-8184 for more information.
- Vulnerability: CVE-2022-37454
  - CVSS Score: N/A

  - Description: The Keccak XKCP SHA-3 reference implementation before fdc6fef has an integer overflow and resultant buffer overflow that allows attackers to execute arbitrary code or eliminate expected cryptographic properties. This occurs in the sponge function interface.

- Vulnerability: CVE-2021-21707
  - CVSS Score: 5
  - Description: In PHP versions 7.3.x below 7.3.33, 7.4.x below 7.4.26 and 8.0.x below 8.0.13, certain XML parsing functions, like simplexml_load_file(), URL-decode the filename passed to them. If that filename contains URL-encoded NUL character, this may cause the function to interpret this as the end of the filename, thus interpreting the filename differently from what the user intended, which may lead it to reading a different file than intended.

- Vulnerability: CVE-2021-21706
  - CVSS Score: 4.3
  - Description: In PHP versions 7.3.x below 7.3.31, 7.4.x below 7.4.24 and 8.0.x below 8.0.11, in Microsoft Windows environment, ZipArchive::extractTo may be tricked into writing a file outside target directory when extracting a ZIP file, thus potentially causing files to be created or overwritten, subject to OS permissions.

- Vulnerability: CVE-2021-21705
  - CVSS Score: 5
  - Description: In PHP versions 7.3.x below 7.3.29, 7.4.x below 7.4.21 and 8.0.x below 8.0.8, when using URL validation functionality via filter_var() function with FILTER_VALIDATE_URL parameter, an URL with invalid password field can be accepted as valid. This can lead to the code incorrectly parsing the URL and potentially leading to other security implications - like contacting a wrong server or making a wrong access decision.

- Vulnerability: CVE-2021-21704
  - CVSS Score: 4.3
  - Description: In PHP versions 7.3.x below 7.3.29, 7.4.x below 7.4.21 and 8.0.x below 8.0.8, when using Firebird PDO driver extension, a malicious database server could cause crashes in various database functions, such as getAttribute(), execute(), fetch() and others by returning invalid response data that is not parsed correctly by the driver. This can result in crashes, denial of service or potentially memory corruption.

- Vulnerability: CVE-2021-21703
  - CVSS Score: 6.9
  - Description: In PHP versions 7.3.x up to and including 7.3.31, 7.4.x below 7.4.25 and 8.0.x below 8.0.12, when running PHP FPM SAPI with main FPM daemon process running as root and child worker processes running as lower-privileged users, it is possible for the child processes to access memory shared with the main process and write to it, modifying it in a way that would cause the root process to conduct invalid memory reads and writes, which can be used to escalate privileges from local unprivileged user to the root user.

- Vulnerability: CVE-2021-21702
  - CVSS Score: 5

  - Description: In PHP versions 7.3.x below 7.3.27, 7.4.x below 7.4.15 and 8.0.x below 8.0.2, when using SOAP extension to connect to a SOAP server, a malicious SOAP server could return malformed XML data as a response that would cause PHP to access a null pointer and thus cause a crash.

- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.

- Vulnerability: CVE-2021-3618
  - CVSS Score: 5.8
  - Description: ALPACA is an application layer protocol content confusion attack, exploiting TLS servers implementing different protocols but using compatible certificates, such as multi-domain or wildcard certificates. A MiTM attacker having access to victim's traffic at the TCP/IP layer can redirect traffic from one subdomain to another, resulting in a valid TLS session. This breaks the authentication of TLS and cross-protocol attacks may be possible where the behavior of one protocol service may compromise the other at the application layer.

- Vulnerability: CVE-2021-21708
  - CVSS Score: 6.8
  - Description: In PHP versions 7.4.x below 7.4.28, 8.0.x below 8.0.16, and 8.1.x below 8.1.3, when using filter functions with FILTER_VALIDATE_FLOAT filter and min/max limits, if the filter fails, there is a possibility to trigger use of allocated memory after free, which can result it crashes, and potentially in overwrite of other memory chunks and RCE. This issue affects: code that uses FILTER_VALIDATE_FLOAT with min/max limits.

- Vulnerability: CVE-2017-9118
  - CVSS Score: 5
  - Description: PHP 7.1.5 has an Out of bounds access in php_pcre_replace_impl via a crafted preg_replace call.

- Vulnerability: CVE-2022-31630
  - CVSS Score: N/A
  - Description: In PHP versions prior to 7.4.33, 8.0.25 and 8.1.12, when using imageloadfont() function in gd extension, it is possible to supply a specially crafted font file, such as if the loaded font is used with imagechar() function, the read outside allocated buffer will be used. This can lead to crashes or disclosure of confidential information.

- Vulnerability: CVE-2023-44487
  - CVSS Score: N/A
  - Description: The HTTP/2 protocol allows a denial of service (server resource consumption) because request cancellation can reset many streams quickly, as exploited in the wild in August through October 2023.

- Vulnerability: CVE-2020-7069
  - CVSS Score: 6.4

  - Description: In PHP versions 7.2.x below 7.2.34, 7.3.x below 7.3.23 and 7.4.x below 7.4.11, when AES-CCM mode is used with openssl_encrypt() function with 12 bytes IV, only first 7 bytes of the IV is actually used. This can lead to both decreased security and incorrect encryption data.

- Vulnerability: CVE-2017-8923
  - CVSS Score: 7.5
  - Description: The zend_string_extend function in Zend/zend_string.h in PHP through 7.1.5 does not prevent changes to string objects that result in a negative length, which allows remote attackers to cause a denial of service (application crash) or possibly have unspecified other impact by leveraging a script's use of .= with a long string.

11.96 IP Address: 159.149.15.22

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 26
- Medium Vulnerabilities: 106
- Low Vulnerabilities: 10
- Total Vulnerabilities: 142

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.18
  - Location: https://159.149.15.22/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.18
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2017-3169
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_ssl may dereference a NULL pointer when third-party modules call ap_hook_process_connection() during an HTTP request to an HTTPS port.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2016-1546
  - CVSS Score: 4.3
  - Description: The Apache HTTP Server 2.4.17 and 2.4.18, when mod_http2 is enabled, does not limit the number of simultaneous stream workers for a single HTTP/2 connection, which allows remote attackers to cause a denial of service (stream-processing outage) via modified flow-control windows.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-1333
  - CVSS Score: 5
  - Description: By specially crafting HTTP/2 requests, workers would be allocated 60 seconds longer than necessary, leading to worker exhaustion and a denial of service. Fixed in Apache HTTP Server 2.4.34 (Affected 2.4.18-2.4.30,2.4.33).
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2018-11763
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.17 to 2.4.34, by sending continuous, large SETTINGS frames a client can occupy a connection, server thread and CPU time without any connection timeout coming to effect. This affects only HTTP/2 connections. A possible mitigation is to not enable the h2 protocol.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2019-0196

  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.

- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2016-5387
  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-40438

  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.

- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5

  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2021-44224

  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2016-4979
  - CVSS Score: 5
  - Description: The Apache HTTP Server 2.4.18 through 2.4.20, when mod_http2 and mod_ssl are enabled, does not properly recognize the "SSLVerifyClient require" directive for HTTP/2 request authorization, which allows remote attackers to bypass intended access restrictions by leveraging the ability to send multiple requests over a single connection and aborting a renegotiation.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1

  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.
- Vulnerability: CVE-2016-8740
  - CVSS Score: 5
  - Description: The mod_http2 module in the Apache HTTP Server 2.4.17 through 2.4.23, when the Protocols configuration includes h2 or h2c, does not restrict request-header length, which allows remote attackers to cause a denial of service (memory consumption) via crafted CONTINUATION frames in an HTTP/2 request.
- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A

  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.

- Vulnerability: CVE-2017-3169
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_ssl may dereference a NULL pointer when third-party modules call ap_hook_process_connection() during an HTTP request to an HTTPS port.

- Vulnerability: CVE-2024-27316

  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5

  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.

- Vulnerability: CVE-2016-1546
  - CVSS Score: 4.3
  - Description: The Apache HTTP Server 2.4.17 and 2.4.18, when mod_http2 is enabled, does not limit the number of simultaneous stream workers for a single HTTP/2 connection, which allows remote attackers to cause a denial of service (stream-processing outage) via modified flow-control windows.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-1333
  - CVSS Score: 5
  - Description: By specially crafting HTTP/2 requests, workers would be allocated 60 seconds longer than necessary, leading to worker exhaustion and a denial of service. Fixed in Apache HTTP Server 2.4.34 (Affected 2.4.18-2.4.30,2.4.33).

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2018-11763
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.17 to 2.4.34, by sending continuous, large SETTINGS frames a client can occupy a connection, server thread and CPU time without any connection timeout coming to effect. This affects only HTTP/2 connections. A possible mitigation is to not enable the h2 protocol.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A

  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.

- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1

  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2016-5387
  - CVSS Score: 6.8

  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4

  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).

- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.

- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2011-2688

  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2016-4979
  - CVSS Score: 5
  - Description: The Apache HTTP Server 2.4.18 through 2.4.20, when mod_http2 and mod_ssl are enabled, does not properly recognize the "SSLVerifyClient require" directive for HTTP/2 request authorization, which allows remote attackers to bypass intended access restrictions by leveraging the ability to send multiple requests over a single connection and aborting a renegotiation.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2018-1301

  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service

- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5

  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2016-8740
  - CVSS Score: 5
  - Description: The mod_http2 module in the Apache HTTP Server 2.4.17 through 2.4.23, when the Protocols configuration includes h2 or h2c, does not restrict request-header length, which allows remote attackers to cause a denial of service (memory consumption) via crafted CONTINUATION frames in an HTTP/2 request.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5

  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

11.97 IP Address: 159.149.104.138

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.98 IP Address: 159.149.53.207

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 22
- Medium Vulnerabilities: 164
- Low Vulnerabilities: 16
- Total Vulnerabilities: 206

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.6
  - Location: https://159.149.53.207/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.6
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3

  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).

- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8

  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786

  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n2̂) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using 'OIDCPreservePost On'.
- Vulnerability: CVE-2024-38476

  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5

  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167

  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.99 IP Address: 159.149.53.132

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 2
- Medium Vulnerabilities: 6
- Low Vulnerabilities: 0
- Total Vulnerabilities: 8

Services Running on IP Address

- Service: Pure-FTPd
  - Port: 21
  - Version: N/A
  - Location:
- Service: Apache httpd
  - Port: 443
  - Version: N/A
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.
- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.
- Vulnerability: CVE-2019-11358
  - CVSS Score: 4.3
  - Description: jQuery before 3.4.0, as used in Drupal, Backdrop CMS, and other products, mishandles jQuery.extend(true, {}, ...) because of Object.prototype pollution. If an unsanitized source object contained an enumerable __proto__ property, it could extend the native Object.prototype.
- Vulnerability: CVE-2024-4577
  - CVSS Score: N/A

  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.

- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.

- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.

- Vulnerability: CVE-2015-9251
  - CVSS Score: 4.3
  - Description: jQuery before 3.0.0 is vulnerable to Cross-site Scripting (XSS) attacks when a cross-domain Ajax request is performed without the dataType option, causing text/javascript responses to be executed.

- Vulnerability: CVE-2024-5458
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, due to a code logic error, filtering functions such as filter_var when validating URLs(FILTER_VALIDATE_URL) for certain types of URLs the function will result in invalid user information (username + password part of URLs) being treated as valid user information. This may lead to the downstream code accepting invalid URLs as valid and parsing them incorrectly.

- Vulnerability: CVE-2020-11022
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.2 and before 3.5.0, passing HTML from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.

- Vulnerability: CVE-2020-11023
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.0.3 and before 3.5.0, passing HTML containing <option> elements from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.

11.100 IP Address: 159.149.132.36

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 6
- Medium Vulnerabilities: 25
- Low Vulnerabilities: 4
- Total Vulnerabilities: 36

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 9.3
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.
- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.
- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2023-51384
  - CVSS Score: N/A
  - Description: In ssh-agent in OpenSSH before 9.6, certain destination constraints can be incompletely applied. When destination constraints are specified during addition of PKCS#11-hosted private keys, these constraints are only applied to the first key, even if a PKCS#11 token returns multiple keys.
- Vulnerability: CVE-2023-51385
  - CVSS Score: N/A

  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.

- Vulnerability: CVE-2024-6387
  - CVSS Score: N/A
  - Description: A security regression (CVE-2006-5051) was discovered in OpenSSH's server (sshd). There is a race condition which can lead sshd to handle some signals in an unsafe manner. An unauthenticated, remote attacker may be able to trigger it by failing to authenticate within a set time period.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5

  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2019-0190
  - CVSS Score: 5

  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2023-6129
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications runningon PowerPC CPU based platforms if the CPU provides vector instructions.Impact summary: If an attacker can influence whether the POLY1305 MACalgorithm is used, the application state might be corrupted with variousapplication dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL forPowerPC CPUs restores the contents of vector registers in a different orderthan they are saved. Thus the contents of some of these vector registersare corrupted when returning to the caller. The vulnerable code is used onlyon newer PowerPC processors supporting the PowerISA 2.07 instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However unless the compiler uses the vector registers for storingpointers, the most likely consequence, if any, would be an incorrect resultof some application dependent calculations or a crash leading to a denial ofservice.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3. If this cipher is enabled on the server a maliciousclient can influence whether this AEAD cipher is used. This implies thatTLS server applications using OpenSSL can be potentially impacted. Howeverwe are currently not aware of any concrete application that would be affectedby this issue therefore we consider this a Low severity security issue.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3

  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5

  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A
  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.
- Vulnerability: CVE-2023-6129
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications runningon PowerPC CPU based platforms if the CPU provides vector instructions.Impact summary: If an attacker can influence whether the POLY1305 MACalgorithm is used, the application state might be corrupted with variousapplication dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL forPowerPC CPUs restores the contents of vector registers in a different orderthan they are saved. Thus the contents of some of these vector registersare corrupted when returning to the caller. The vulnerable code is used onlyon newer PowerPC processors supporting the PowerISA 2.07 instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However unless the compiler uses the vector registers for storingpointers, the most likely consequence, if any, would be an incorrect resultof some application dependent calculations or a crash leading to a denial ofservice.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3. If this cipher is enabled on the server a maliciousclient can influence whether this AEAD cipher is used. This implies thatTLS server applications using OpenSSL can be potentially impacted. Howeverwe are currently not aware of any concrete application that would be affectedby this issue therefore we consider this a Low severity security issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A

  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-3446
  - CVSS Score: N/A

  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. One of thosechecks confirms that the modulus ('p' parameter) is not too large. Trying to usea very large modulus is slow and OpenSSL will not normally use a modulus whichis over 10,000 bits in length.However the DH_check() function checks numerous aspects of the key or parametersthat have been supplied. Some of those checks use the supplied modulus valueeven if it has already been found to be too large.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulernable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the '-check' option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2023-2975
  - CVSS Score: N/A
  - Description: Issue summary: The AES-SIV cipher implementation contains a bug that causesit to ignore empty associated data entries which are unauthenticated asa consequence.Impact summary: Applications that use the AES-SIV algorithm and want toauthenticate empty data entries as associated data can be mislead by removingadding or reordering such empty entries as these are ignored by the OpenSSLimplementation. We are currently unaware of any such applications.The AES-SIV algorithm allows for authentication of multiple associateddata entries along with the encryption. To authenticate empty data theapplication has to call EVP_EncryptUpdate() (or EVP_CipherUpdate()) withNULL pointer as the output buffer and 0 as the input buffer length.The AES-SIV implementation in OpenSSL just returns success for such a callinstead of performing the associated data authentication operation.The empty data thus will not be authenticated.As this issue does not affect non-empty associated data authentication andwe expect it to be rare for an application to use empty associated dataentries this is qualified as Low severity issue.

- Vulnerability: CVE-2023-5363
  - CVSS Score: N/A
  - Description: Issue summary: A bug has been identified in the processing of key andinitialisation vector (IV) lengths. This can lead to potential truncationor overruns during the initialisation of some symmetric ciphers.Impact summary: A truncation in the IV can result in non-uniqueness,which could result in loss of confidentiality for some cipher modes.When calling EVP_EncryptInit_ex2(), EVP_DecryptInit_ex2() orEVP_CipherInit_ex2() the provided OSSL_PARAM array is processed afterthe key and IV have been established. Any alterations to the key length,via the "keylen" parameter or the IV length, via the "ivlen" parameter,within the OSSL_PARAM array will not take effect as intended, potentiallycausing truncation or overreading of these values. The following ciphersand cipher modes are impacted: RC2, RC4, RC5, CCM, GCM and OCB.For the CCM, GCM and OCB cipher modes, truncation of the IV can result inloss of confidentiality. For example, when following NIST's SP 800-38Dsection 8.2.1 guidance for constructing a deterministic IV for AES inGCM mode, truncation of the counter portion could lead to IV reuse.Both truncations and overruns of the key and overruns of the IV willproduce incorrect results and could, in some cases, trigger a memoryexception. However, these issues are not currently assessed as securitycritical.Changing the key and/or IV lengths is not considered to be a common operationand the vulnerable API was recently introduced. Furthermore it is likely thatapplication developers will have spotted this problem during testing sincedecryption would fail unless both peers in the communication were similarlyvulnerable. For these reasons we expect the probability of an application beingvulnerable to this to be quite low. However if an application is vulnerable thenthis issue is considered very serious. For these reasons we have assessed thisissue as Moderate severity overall.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this becausethe issue lies outside of the FIPS provider boundary.OpenSSL 3.1 and 3.0 are vulnerable to this issue.

11.101 IP Address: 159.149.45.65

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 22
- Medium Vulnerabilities: 164
- Low Vulnerabilities: 16
- Total Vulnerabilities: 206

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.6
  - Location: /
- Service: N/A
  - Port: 5280
  - Version: N/A
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3

  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.
- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.
- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using 'OIDCPreservePost On'.
- Vulnerability: CVE-2024-38476

  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5

  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167

  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n^2) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2014-3581
  - CVSS Score: 5

  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8

  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8

  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8
  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464

  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A
  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387

  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A

  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3
  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2021-23840
  - CVSS Score: 5

  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3

  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).

- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3
  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6

  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.102 IP Address: 51.116.169.26

- Organization: Microsoft Limited UK
- Operating System: Windows
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 4
- Low Vulnerabilities: 0
- Total Vulnerabilities: 4

Services Running on IP Address

- Service: Microsoft IIS httpd
  - Port: 443
  - Version: 10.0
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2015-9251
  - CVSS Score: 4.3
  - Description: jQuery before 3.0.0 is vulnerable to Cross-site Scripting (XSS) attacks when a cross-domain Ajax request is performed without the dataType option, causing text/javascript responses to be executed.
- Vulnerability: CVE-2019-11358
  - CVSS Score: 4.3
  - Description: jQuery before 3.4.0, as used in Drupal, Backdrop CMS, and other products, mishandles jQuery.extend(true, {}, ...) because of Object.prototype pollution. If an unsanitized source object contained an enumerable __proto__ property, it could extend the native Object.prototype.
- Vulnerability: CVE-2020-11022
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.2 and before 3.5.0, passing HTML from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.
- Vulnerability: CVE-2020-11023
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.0.3 and before 3.5.0, passing HTML containing <option> elements from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.

11.103 IP Address: 159.149.130.90

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 20
- Medium Vulnerabilities: 70
- Low Vulnerabilities: 6
- Total Vulnerabilities: 96

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.2p1 Ubuntu-4ubuntu0.11
  - Location:
- Service: Postfix smtpd
  - Port: 25
  - Version: N/A
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.41
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.41
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2021-30641
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.39 to 2.4.46 Unexpected matching behavior with 'MergeSlashes OFF'
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5

  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A

  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2020-11022
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.2 and before 3.5.0, passing HTML from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.
- Vulnerability: CVE-2020-11023
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.0.3 and before 3.5.0, passing HTML containing <option> elements from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2021-32786

  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5

  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service

- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A

  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2020-13950
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.41 to 2.4.46 mod_proxy_http can be made to crash (NULL pointer dereference) with specially crafted requests using both Content-Length and Transfer-Encoding headers, leading to a Denial of Service
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2021-30641
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.39 to 2.4.46 Unexpected matching behavior with 'MergeSlashes OFF'
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5

  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2020-11022
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.2 and before 3.5.0, passing HTML from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.
- Vulnerability: CVE-2020-11023
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.0.3 and before 3.5.0, passing HTML containing <option> elements from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A

  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942

  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service

- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows

- Vulnerability: CVE-2009-2299

  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2020-13950
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.41 to 2.4.46 mod_proxy_http can be made to crash (NULL pointer dereference) with specially crafted requests using both Content-Length and Transfer-Encoding headers, leading to a Denial of Service

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

11.104 IP Address: 172.64.151.32

- Organization: Cloudflare, Inc.
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: /
- Service: N/A
  - Port: 2087
  - Version: N/A
  - Location:
- Service: N/A
  - Port: 8880
  - Version: N/A
  - Location:

No vulnerabilities found for this IP address.

11.105 IP Address: 159.149.130.182

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 4
- Medium Vulnerabilities: 9
- Low Vulnerabilities: 2
- Total Vulnerabilities: 16

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 9.6
  - Location:
- Service: N/A
  - Port: 80
  - Version: N/A
  - Location: https://grew.di.unimi.it/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.57
  - Location: http://grew.di.unimi.it/index.php?title=Main_Page

Vulnerabilities Found

- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.
- Vulnerability: CVE-2024-6387
  - CVSS Score: N/A

  - Description: A security regression (CVE-2006-5051) was discovered in OpenSSH's server (sshd). There is a race condition which can lead sshd to handle some signals in an unsafe manner. An unauthenticated, remote attacker may be able to trigger it by failing to authenticate within a set time period.

- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.

- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.

- Vulnerability: CVE-2024-4577
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2024-5458
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, due to a code logic error, filtering functions such as filter_var when validating URLs(FILTER_VALIDATE_URL) for certain types of URLs the function will result in invalid user information (username + password part of URLs) being treated as valid user information. This may lead to the downstream code accepting invalid URLs as valid and parsing them incorrectly.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2011-1176

  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2023-43622
  - CVSS Score: N/A
  - Description: An attacker, opening a HTTP/2 connection with an initial window size of 0, was able to block handling of that connection indefinitely in Apache HTTP Server. This could be used to exhaust worker resources in the server, similar to the well known "slow loris" attack pattern.This has been fixed in version 2.4.58, so that such connection are terminated properly after the configured connection timeout.This issue affects Apache HTTP Server: from 2.4.55 through 2.4.57.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1

  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

11.106 IP Address: 185.221.216.115

- Organization: Global Managed Hosting Inc.
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 0
- Medium Vulnerabilities: 11
- Low Vulnerabilities: 2
- Total Vulnerabilities: 14

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 7.4
  - Location:
- Service: N/A
  - Port: 53
  - Version: N/A
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: N/A
  - Location: /
- Service: N/A
  - Port: 110
  - Version: N/A
  - Location:
- Service: N/A
  - Port: 143
  - Version: N/A
  - Location:
- Service: Apache httpd
  - Port: 443
  - Version: N/A
  - Location: /
- Service: Exim smtpd
  - Port: 587
  - Version: 4.97.1
  - Location:
- Service: N/A

  - Port: 993
  - Version: N/A
  - Location:
- Service: N/A
  - Port: 995
  - Version: N/A
  - Location:
- Service: N/A
  - Port: 2079
  - Version: N/A
  - Location: https://cpanel.system.com:2080/
- Service: N/A
  - Port: 2082
  - Version: N/A
  - Location: https://185.221.216.115:2083/
- Service: cPanel
  - Port: 2083
  - Version: N/A
  - Location: /
- Service: N/A
  - Port: 2086
  - Version: N/A
  - Location: https://cpanel.system.com:2087/
- Service: WHM
  - Port: 2087
  - Version: N/A
  - Location: /
- Service: N/A
  - Port: 2095
  - Version: N/A
  - Location: https://185.221.216.115:2096/
- Service: MariaDB
  - Port: 3306
  - Version: N/A
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.
- Vulnerability: CVE-2019-6110
  - CVSS Score: 4
  - Description: In OpenSSH 7.9, due to accepting and displaying arbitrary stderr output from the server, a malicious server (or Man-in-The-Middle attacker) can manipulate the client output, for example to use ANSI control codes to hide additional files being transferred.
- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2018-15919
  - CVSS Score: 5
  - Description: Remotely observable behaviour in auth-gss2.c in OpenSSH through 7.8 could be used by remote attackers to detect existence of users on a target system when GSS2 is in use. NOTE: the discoverer states 'We understand that the OpenSSH developers do not want to treat such a username enumeration (or "oracle") as a vulnerability.'
- Vulnerability: CVE-2018-15473
  - CVSS Score: 5
  - Description: OpenSSH through 7.7 is prone to a user enumeration vulnerability due to not delaying bailout for an invalid authenticating user until after the packet containing the request has been fully parsed, related to auth2-gss.c, auth2-hostbased.c, and auth2-pubkey.c.
- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6
  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.
- Vulnerability: CVE-2017-15906

  - CVSS Score: 5
  - Description: The process_open function in sftp-server.c in OpenSSH before 7.6 does not properly prevent write operations in readonly mode, which allows attackers to create zero-length files.

- Vulnerability: CVE-2018-20685
  - CVSS Score: 2.6
  - Description: In OpenSSH 7.9, scp.c in the scp client allows remote SSH servers to bypass intended access restrictions via the filename of . or an empty filename. The impact is modifying the permissions of the target directory on the client side.

- Vulnerability: CVE-2020-14145
  - CVSS Score: 4.3
  - Description: The client side in OpenSSH 5.7 through 8.4 has an Observable Discrepancy leading to an information leak in the algorithm negotiation. This allows man-in-the-middle attackers to target initial connection attempts (where no host key for the server has been cached by the client). NOTE: some reports state that 8.5 and 8.6 are also affected.

- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.

- Vulnerability: CVE-2020-15778
  - CVSS Score: 6.8
  - Description: scp in OpenSSH through 8.3p1 allows command injection in the scp.c toremote function, as demonstrated by backtick characters in the destination argument. NOTE: the vendor reportedly has stated that they intentionally omit validation of "anomalous argument transfers" because that could "stand a great chance of breaking existing workflows."

- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.
- Vulnerability: CVE-2019-6111

  - CVSS Score: 5.8
  - Description: An issue was discovered in OpenSSH 7.9. Due to the scp implementation being derived from 1983 rcp, the server chooses which files/directories are sent to the client. However, the scp client only performs cursory validation of the object name returned (only directory traversal attacks are prevented). A malicious scp server (or Man-in-The-Middle attacker) can overwrite arbitrary files in the scp client target directory. If recursive operation (-r) is performed, the server can manipulate subdirectories as well (for example, to overwrite the .ssh/authorized_keys file).

- Vulnerability: CVE-2023-51385
  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.
- Vulnerability: CVE-2019-6109
  - CVSS Score: 4
  - Description: An issue was discovered in OpenSSH 7.9. Due to missing character encoding in the progress display, a malicious server (or Man-in-The-Middle attacker) can employ crafted object names to manipulate the client output, e.g., by using ANSI control codes to hide additional files being transferred. This affects refresh_progress_meter() in progressmeter.c.

11.107 IP Address: 159.149.10.81

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: Postfix smtpd
  - Port: 465
  - Version: N/A
  - Location:

No vulnerabilities found for this IP address.

11.108 IP Address: 159.149.47.69

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 4
- Medium Vulnerabilities: 16
- Low Vulnerabilities: 1
- Total Vulnerabilities: 22

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.0
  - Location:
- Service: nginx
  - Port: 443
  - Version: 1.14.1
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2019-16905
  - CVSS Score: 4.4
  - Description: OpenSSH 7.7 through 7.9 and 8.x before 8.1, when compiled with an experimental key type, has a pre-authentication integer overflow if a client or server is configured to use a crafted XMSS key. This leads to memory corruption and local code execution because of an error in the XMSS key parsing algorithm. NOTE: the XMSS implementation is considered experimental in all released OpenSSH versions, and there is no supported way to enable it when building portable OpenSSH.
- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6
  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.

- Vulnerability: CVE-2020-14145
  - CVSS Score: 4.3
  - Description: The client side in OpenSSH 5.7 through 8.4 has an Observable Discrepancy leading to an information leak in the algorithm negotiation. This allows man-in-the-middle attackers to target initial connection attempts (where no host key for the server has been cached by the client). NOTE: some reports state that 8.5 and 8.6 are also affected.
- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.
- Vulnerability: CVE-2020-15778
  - CVSS Score: 6.8
  - Description: scp in OpenSSH through 8.3p1 allows command injection in the scp.c toremote function, as demonstrated by backtick characters in the destination argument. NOTE: the vendor reportedly has stated that they intentionally omit validation of "anomalous argument transfers" because that could "stand a great chance of breaking existing workflows."
- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.
- Vulnerability: CVE-2023-51385

  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.
- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.
- Vulnerability: CVE-2023-44487
  - CVSS Score: N/A
  - Description: The HTTP/2 protocol allows a denial of service (server resource consumption) because request cancellation can reset many streams quickly, as exploited in the wild in August through October 2023.
- Vulnerability: CVE-2019-9516
  - CVSS Score: 6.8
  - Description: Some HTTP/2 implementations are vulnerable to a header leak, potentially leading to a denial of service. The attacker sends a stream of headers with a 0-length header name and 0-length header value, optionally Huffman encoded into 1-byte or greater headers. Some implementations allocate memory for these headers and keep the allocation alive until the session dies. This can consume excess memory.
- Vulnerability: CVE-2019-9513
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to resource loops, potentially leading to a denial of service. The attacker creates multiple request streams and continually shuffles the priority of the streams in a way that causes substantial churn to the priority tree. This can consume excess CPU.
- Vulnerability: CVE-2019-9511
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to window size manipulation and stream prioritization manipulation, potentially leading to a denial of service. The attacker requests a large amount of data from a specified resource over multiple streams. They manipulate window size and stream priority to force the server to queue the data in 1-byte chunks. Depending on how efficiently this data is queued, this can consume excess CPU, memory, or both.
- Vulnerability: CVE-2021-23017
  - CVSS Score: 6.8

  - Description: A security issue in nginx resolver was identified, which might allow an attacker who is able to forge UDP packets from the DNS server to cause 1-byte memory overwrite, resulting in worker process crash or potential other impact.

- Vulnerability: CVE-2021-3618
  - CVSS Score: 5.8
  - Description: ALPACA is an application layer protocol content confusion attack, exploiting TLS servers implementing different protocols but using compatible certificates, such as multi-domain or wildcard certificates. A MiTM attacker having access to victim's traffic at the TCP/IP layer can redirect traffic from one subdomain to another, resulting in a valid TLS session. This breaks the authentication of TLS and cross-protocol attacks may be possible where the behavior of one protocol service may compromise the other at the application layer.

- Vulnerability: CVE-2019-20372
  - CVSS Score: 4.3
  - Description: NGINX before 1.17.7, with certain error_page configurations, allows HTTP request smuggling, as demonstrated by the ability of an attacker to read unauthorized web pages in environments where NGINX is being fronted by a load balancer.

- Vulnerability: CVE-2018-16845
  - CVSS Score: 5.8
  - Description: nginx before versions 1.15.6, 1.14.1 has a vulnerability in the ngx_http_mp4_module, which might allow an attacker to cause infinite loop in a worker process, cause a worker process crash, or might result in worker process memory disclosure by using a specially crafted mp4 file. The issue only affects nginx if it is built with the ngx_http_mp4_module (the module is not built by default) and the .mp4. directive is used in the configuration file. Further, the attack is only possible if an attacker is able to trigger processing of a specially crafted mp4 file with the ngx_http_mp4_module.

- Vulnerability: CVE-2023-44487
  - CVSS Score: N/A
  - Description: The HTTP/2 protocol allows a denial of service (server resource consumption) because request cancellation can reset many streams quickly, as exploited in the wild in August through October 2023.

- Vulnerability: CVE-2019-9516
  - CVSS Score: 6.8
  - Description: Some HTTP/2 implementations are vulnerable to a header leak, potentially leading to a denial of service. The attacker sends a stream of headers with a 0-length header name and 0-length header value, optionally Huffman encoded into 1-byte or greater headers. Some implementations allocate memory for these headers and keep the allocation alive until the session dies. This can consume excess memory.

- Vulnerability: CVE-2019-9513
  - CVSS Score: 7.8

  - Description: Some HTTP/2 implementations are vulnerable to resource loops, potentially leading to a denial of service. The attacker creates multiple request streams and continually shuffles the priority of the streams in a way that causes substantial churn to the priority tree. This can consume excess CPU.

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  - Description: Some HTTP/2 implementations are vulnerable to window size manipulation and stream prioritization manipulation, potentially leading to a denial of service. The attacker requests a large amount of data from a specified resource over multiple streams. They manipulate window size and stream priority to force the server to queue the data in 1-byte chunks. Depending on how efficiently this data is queued, this can consume excess CPU, memory, or both.

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- Vulnerability: CVE-2021-3618
  - CVSS Score: 5.8
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- Vulnerability: CVE-2019-20372
  - CVSS Score: 4.3
  - Description: NGINX before 1.17.7, with certain error_page configurations, allows HTTP request smuggling, as demonstrated by the ability of an attacker to read unauthorized web pages in environments where NGINX is being fronted by a load balancer.

- Vulnerability: CVE-2018-16845
  - CVSS Score: 5.8
  - Description: nginx before versions 1.15.6, 1.14.1 has a vulnerability in the ngx_http_mp4_module, which might allow an attacker to cause infinite loop in a worker process, cause a worker process crash, or might result in worker process memory disclosure by using a specially crafted mp4 file. The issue only affects nginx if it is built with the ngx_http_mp4_module (the module is not built by default) and the .mp4. directive is used in the configuration file. Further, the attack is only possible if an attacker is able to trigger processing of a specially crafted mp4 file with the ngx_http_mp4_module.

11.109 IP Address: 2606:4700::6812:a1d

- Organization: Cloudflare, Inc.
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.110 IP Address: 159.149.129.228

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 5
- High Vulnerabilities: 26
- Medium Vulnerabilities: 110
- Low Vulnerabilities: 7
- Total Vulnerabilities: 148

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.0
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.37
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.37
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2019-16905
  - CVSS Score: 4.4
  - Description: OpenSSH 7.7 through 7.9 and 8.x before 8.1, when compiled with an experimental key type, has a pre-authentication integer overflow if a client or server is configured to use a crafted XMSS key. This leads to memory corruption and local code execution because of an error in the XMSS key parsing algorithm. NOTE: the XMSS implementation is considered experimental in all released OpenSSH versions, and there is no supported way to enable it when building portable OpenSSH.
- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6

  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.

- Vulnerability: CVE-2020-14145
  - CVSS Score: 4.3
  - Description: The client side in OpenSSH 5.7 through 8.4 has an Observable Discrepancy leading to an information leak in the algorithm negotiation. This allows man-in-the-middle attackers to target initial connection attempts (where no host key for the server has been cached by the client). NOTE: some reports state that 8.5 and 8.6 are also affected.
- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.
- Vulnerability: CVE-2020-15778
  - CVSS Score: 6.8
  - Description: scp in OpenSSH through 8.3p1 allows command injection in the scp.c toremote function, as demonstrated by backtick characters in the destination argument. NOTE: the vendor reportedly has stated that they intentionally omit validation of "anomalous argument transfers" because that could "stand a great chance of breaking existing workflows."
- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.
- Vulnerability: CVE-2023-51385

  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.

- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.

- Vulnerability: CVE-2019-0215
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 releases 2.4.37 and 2.4.38, a bug in mod_ssl when using per-location client certificate verification with TLSv1.3 allowed a client to bypass configured access control restrictions.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2021-36160

  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2021-32786

  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n2̂) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2019-0197
  - CVSS Score: 4.9
  - Description: A vulnerability was found in Apache HTTP Server 2.4.34 to 2.4.38. When HTTP/2 was enabled for a http: host or H2Upgrade was enabled for h2 on a https: host, an Upgrade request from http/1.1 to http/2 that was not the first request on a connection could lead to a misconfiguration and crash. Server that never enabled the h2 protocol or that only enabled it for https: and did not set "H2Upgrade on" are unaffected by this issue.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220

  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-3711
  - CVSS Score: 7.5
  - Description: In order to decrypt SM2 encrypted data an application is expected to call the API function EVP_PKEY_decrypt(). Typically an application will call this function twice. The first time, on entry, the "out" parameter can be NULL and, on exit, the "outlen" parameter is populated with the buffer size required to hold the decrypted plaintext. The application can then allocate a sufficiently sized buffer and call EVP_PKEY_decrypt() again, but this time passing a non-NULL value for the "out" parameter. A bug in the implementation of the SM2 decryption code means that the calculation of the buffer size required to hold the plaintext returned by the first call to EVP_PKEY_decrypt() can be smaller than the actual size required by the second call. This can lead to a buffer overflow when EVP_PKEY_decrypt() is called by the application a second time with a buffer that is too small. A malicious attacker who is able present SM2 content for decryption to an application could cause attacker chosen data to overflow the buffer by up to a maximum of 62 bytes altering the contents of other data held after the buffer, possibly changing application behaviour or causing the application to crash. The location of the buffer is application dependent but is typically heap allocated. Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k).
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4

  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2019-10097
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4.32-2.4.39, when mod_remoteip was configured to use a trusted intermediary proxy server using the "PROXY" protocol, a specially crafted PROXY header could trigger a stack buffer overflow or NULL pointer deference. This vulnerability could only be triggered by a trusted proxy and not by untrusted HTTP clients.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3

  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2022-2097
  - CVSS Score: 5
  - Description: AES OCB mode for 32-bit x86 platforms using the AES-NI assembly optimised implementation will not encrypt the entirety of the data under some circumstances. This could reveal sixteen bytes of data that was preexisting in the memory that wasn't written. In the special case of "in place" encryption, sixteen bytes of the plaintext would be revealed. Since OpenSSL does not support OCB based cipher suites for TLS and DTLS, they are both unaffected. Fixed in OpenSSL 3.0.5 (Affected 3.0.0-3.0.4). Fixed in OpenSSL 1.1.1q (Affected 1.1.1-1.1.1p).
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).
- Vulnerability: CVE-2012-4001

  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1

  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2019-0215
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 releases 2.4.37 and 2.4.38, a bug in mod_ssl when using per-location client certificate verification with TLSv1.3 allowed a client to bypass configured access control restrictions.

- Vulnerability: CVE-2013-4365

  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A

  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).

- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A

  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A

  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A

  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2019-0197
  - CVSS Score: 4.9
  - Description: A vulnerability was found in Apache HTTP Server 2.4.34 to 2.4.38. When HTTP/2 was enabled for a http: host or H2Upgrade was enabled for h2 on a https: host, an Upgrade request from http/1.1 to http/2 that was not the first request on a connection could lead to a misconfiguration and crash. Server that never enabled the h2 protocol or that only enabled it for https: and did not set "H2Upgrade on" are unaffected by this issue.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0190
  - CVSS Score: 5
  - Description: A bug exists in the way mod_ssl handled client renegotiations. A remote attacker could send a carefully crafted request that would cause mod_ssl to enter a loop leading to a denial of service. This bug can be only triggered with Apache HTTP Server version 2.4.37 when using OpenSSL version 1.1.1 or later, due to an interaction in changes to handling of renegotiation attempts.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2023-4807
  - CVSS Score: N/A

  - Description: Issue summary: The POLY1305 MAC (message authentication code) implementationcontains a bug that might corrupt the internal state of applications on theWindows 64 platform when running on newer X86_64 processors supporting theAVX512-IFMA instructions.Impact summary: If in an application that uses the OpenSSL library an attackercan influence whether the POLY1305 MAC algorithm is used, the applicationstate might be corrupted with various application dependent consequences.The POLY1305 MAC (message authentication code) implementation in OpenSSL doesnot save the contents of non-volatile XMM registers on Windows 64 platformwhen calculating the MAC of data larger than 64 bytes. Before returning tothe caller all the XMM registers are set to zero rather than restoring theirprevious content. The vulnerable code is used only on newer x86_64 processorssupporting the AVX512-IFMA instructions.The consequences of this kind of internal application state corruption canbe various - from no consequences, if the calling application does notdepend on the contents of non-volatile XMM registers at all, to the worstconsequences, where the attacker could get complete control of the applicationprocess. However given the contents of the registers are just zeroized sothe attacker cannot put arbitrary values inside, the most likely consequence,if any, would be an incorrect result of some application dependentcalculations or a crash leading to a denial of service.The POLY1305 MAC algorithm is most frequently used as part of theCHACHA20-POLY1305 AEAD (authenticated encryption with associated data)algorithm. The most common usage of this AEAD cipher is with TLS protocolversions 1.2 and 1.3 and a malicious client can influence whether this AEADcipher is used by the server. This implies that server applications usingOpenSSL can be potentially impacted. However we are currently not aware ofany concrete application that would be affected by this issue therefore weconsider this a Low severity security issue.As a workaround the AVX512-IFMA instructions support can be disabled atruntime by setting the environment variable OPENSSL_ia32cap: OPENSSL_ia32cap=:~0x200000The FIPS provider is not affected by this issue.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220

  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-3711
  - CVSS Score: 7.5
  - Description: In order to decrypt SM2 encrypted data an application is expected to call the API function EVP_PKEY_decrypt(). Typically an application will call this function twice. The first time, on entry, the "out" parameter can be NULL and, on exit, the "outlen" parameter is populated with the buffer size required to hold the decrypted plaintext. The application can then allocate a sufficiently sized buffer and call EVP_PKEY_decrypt() again, but this time passing a non-NULL value for the "out" parameter. A bug in the implementation of the SM2 decryption code means that the calculation of the buffer size required to hold the plaintext returned by the first call to EVP_PKEY_decrypt() can be smaller than the actual size required by the second call. This can lead to a buffer overflow when EVP_PKEY_decrypt() is called by the application a second time with a buffer that is too small. A malicious attacker who is able present SM2 content for decryption to an application could cause attacker chosen data to overflow the buffer by up to a maximum of 62 bytes altering the contents of other data held after the buffer, possibly changing application behaviour or causing the application to crash. The location of the buffer is application dependent but is typically heap allocated. Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k).
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2009-3766
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4

  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2019-10097
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4.32-2.4.39, when mod_remoteip was configured to use a trusted intermediary proxy server using the "PROXY" protocol, a specially crafted PROXY header could trigger a stack buffer overflow or NULL pointer deference. This vulnerability could only be triggered by a trusted proxy and not by untrusted HTTP clients.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3

  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2022-2097
  - CVSS Score: 5
  - Description: AES OCB mode for 32-bit x86 platforms using the AES-NI assembly optimised implementation will not encrypt the entirety of the data under some circumstances. This could reveal sixteen bytes of data that was preexisting in the memory that wasn't written. In the special case of "in place" encryption, sixteen bytes of the plaintext would be revealed. Since OpenSSL does not support OCB based cipher suites for TLS and DTLS, they are both unaffected. Fixed in OpenSSL 3.0.5 (Affected 3.0.0-3.0.4). Fixed in OpenSSL 1.1.1q (Affected 1.1.1-1.1.1p).
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A
  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10
  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).
- Vulnerability: CVE-2012-4001

  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2022-4450
  - CVSS Score: N/A
  - Description: The function PEM_read_bio_ex() reads a PEM file from a BIO and parses anddecodes the "name" (e.g. "CERTIFICATE"), any header data and the payload data.If the function succeeds then the "name_out", "header" and "data" arguments arepopulated with pointers to buffers containing the relevant decoded data. Thecaller is responsible for freeing those buffers. It is possible to construct aPEM file that results in 0 bytes of payload data. In this case PEM_read_bio_ex()will return a failure code but will populate the header argument with a pointerto a buffer that has already been freed. If the caller also frees this bufferthen a double free will occur. This will most likely lead to a crash. Thiscould be exploited by an attacker who has the ability to supply malicious PEMfiles for parsing to achieve a denial of service attack.The functions PEM_read_bio() and PEM_read() are simple wrappers aroundPEM_read_bio_ex() and therefore these functions are also directly affected.These functions are also called indirectly by a number of other OpenSSLfunctions including PEM_X509_INFO_read_bio_ex() andSSL_CTX_use_serverinfo_file() which are also vulnerable. Some OpenSSL internaluses of these functions are not vulnerable because the caller does not free theheader argument if PEM_read_bio_ex() returns a failure code. These locationsinclude the PEM_read_bio_TYPE() functions as well as the decoders introduced inOpenSSL 3.0.The OpenSSL asn1parse command line application is also impacted by this issue.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1

  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.111 IP Address: 159.149.129.197

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 12
- Medium Vulnerabilities: 34
- Low Vulnerabilities: 4
- Total Vulnerabilities: 50

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.9p1 Ubuntu 3ubuntu0.10
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.52
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.52
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A

  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2013-0941

  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A

  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A

  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2015-9251
  - CVSS Score: 4.3
  - Description: jQuery before 3.0.0 is vulnerable to Cross-site Scripting (XSS) attacks when a cross-domain Ajax request is performed without the dataType option, causing text/javascript responses to be executed.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2020-11022
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.2 and before 3.5.0, passing HTML from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.
- Vulnerability: CVE-2020-11023
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.0.3 and before 3.5.0, passing HTML containing <option> elements from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5

  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2019-11358
  - CVSS Score: 4.3

  - Description: jQuery before 3.4.0, as used in Drupal, Backdrop CMS, and other products, mishandles jQuery.extend(true, {}, ...) because of Object.prototype pollution. If an unsanitized source object contained an enumerable __proto__ property, it could extend the native Object.prototype.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.

11.112 IP Address: 159.149.53.224

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 4
- High Vulnerabilities: 28
- Medium Vulnerabilities: 184
- Low Vulnerabilities: 16
- Total Vulnerabilities: 232

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.6
  - Location: https://159.149.53.224/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.6
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2017-7272
  - CVSS Score: 5.8
  - Description: PHP through 7.1.11 enables potential SSRF in applications that accept an fsockopen or pfsockopen hostname argument with an expectation that the port number is constrained. Because a :port syntax is recognized, fsockopen will use the port number that is specified in the hostname argument, instead of the port number in the second argument of the function.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5

  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.

- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3
  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.
- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.
- Vulnerability: CVE-2024-4577
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A

  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.

- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A

  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A
  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.
- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A
  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n2̂) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.
- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2022-31628
  - CVSS Score: N/A
  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the phar uncompressor code would recursively uncompress "quines" gzip files, resulting in an infinite loop.
- Vulnerability: CVE-2022-31629
  - CVSS Score: N/A

  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the vulnerability enables network and same-site attackers to set a standard insecure cookie in the victim's browser which is treated as a '__Host-' or '__Secure-' cookie by PHP applications.

- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.

- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2018-19396
  - CVSS Score: 5
  - Description: ext/standard/var_unserializer.c in PHP 5.x through 7.1.24 allows attackers to cause a denial of service (application crash) via an unserialize call for the com, dotnet, or variant class.

- Vulnerability: CVE-2018-19395
  - CVSS Score: 5
  - Description: ext/standard/var.c in PHP 5.x through 7.1.24 on Windows allows attackers to cause a denial of service (NULL pointer dereference and application crash) because com and com_safearray_proxy return NULL in com_properties_get in ext/com_dotnet/com_handlers.c, as demonstrated by a serialize call on COM("WScript.Shell").

- Vulnerability: CVE-2017-8923
  - CVSS Score: 7.5
  - Description: The zend_string_extend function in Zend/zend_string.h in PHP through 7.1.5 does not prevent changes to string objects that result in a negative length, which allows remote attackers to cause a denial of service (application crash) or possibly have unspecified other impact by leveraging a script's use of .= with a long string.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-9639
  - CVSS Score: 5
  - Description: An issue was discovered in the EXIF component in PHP before 7.1.27, 7.2.x before 7.2.16, and 7.3.x before 7.3.3. There is an uninitialized read in exif_process_IFD_in_MAKERNOTE because of mishandling the data_len variable.
- Vulnerability: CVE-2019-9638
  - CVSS Score: 5
  - Description: An issue was discovered in the EXIF component in PHP before 7.1.27, 7.2.x before 7.2.16, and 7.3.x before 7.3.3. There is an uninitialized read in exif_process_IFD_in_MAKERNOTE because of mishandling the maker_note->offset relationship to value_len.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.
- Vulnerability: CVE-2019-9637
  - CVSS Score: 5
  - Description: An issue was discovered in PHP before 7.1.27, 7.2.x before 7.2.16, and 7.3.x before 7.3.3. Due to the way rename() across filesystems is implemented, it is possible that file being renamed is briefly available with wrong permissions while the rename is ongoing, thus enabling unauthorized users to access the data.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2017-7963
  - CVSS Score: 5

  - Description: The GNU Multiple Precision Arithmetic Library (GMP) interfaces for PHP through 7.1.4 allow attackers to cause a denial of service (memory consumption and application crash) via operations on long strings. NOTE: the vendor disputes this, stating "There is no security issue here, because GMP safely aborts in case of an OOM condition. The only attack vector here is denial of service. However, if you allow attacker-controlled, unbounded allocations you have a DoS vector regardless of GMP's OOM behavior.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2014-3581
  - CVSS Score: 5
  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.
- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.
- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8
  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2009-3766

  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2015-9253
  - CVSS Score: 6.8
  - Description: An issue was discovered in PHP 7.3.x before 7.3.0alpha3, 7.2.x before 7.2.8, and before 7.1.20. The php-fpm master process restarts a child process in an endless loop when using program execution functions (e.g., passthru, exec, shell_exec, or system) with a non-blocking STDIN stream, causing this master process to consume 100% of the CPU, and consume disk space with a large volume of error logs, as demonstrated by an attack by a customer of a shared-hosting facility.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387
  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2021-23840
  - CVSS Score: 5
  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690

  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3

  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2019-9641
  - CVSS Score: 7.5
  - Description: An issue was discovered in the EXIF component in PHP before 7.1.27, 7.2.x before 7.2.16, and 7.3.x before 7.3.3. There is an uninitialized read in exif_process_IFD_in_TIFF.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2020-11579
  - CVSS Score: 5
  - Description: An issue was discovered in Chadha PHPKB 9.0 Enterprise Edition. installer/test-connection.php (part of the installation process) allows a remote unauthenticated attacker to disclose local files on hosts running PHP before 7.2.16, or on hosts where the MySQL ALLOW LOCAL DATA INFILE option is enabled.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2018-17199
  - CVSS Score: 5

  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3
  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).
- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3

  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.
- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.
- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2022-28615

  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2014-0117
  - CVSS Score: 4.3
  - Description: The mod_proxy module in the Apache HTTP Server 2.4.x before 2.4.10, when a reverse proxy is enabled, allows remote attackers to cause a denial of service (child-process crash) via a crafted HTTP Connection header.

- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.

- Vulnerability: CVE-2017-7272
  - CVSS Score: 5.8
  - Description: PHP through 7.1.11 enables potential SSRF in applications that accept an fsockopen or pfsockopen hostname argument with an expectation that the port number is constrained. Because a :port syntax is recognized, fsockopen will use the port number that is specified in the hostname argument, instead of the port number in the second argument of the function.

- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.

- Vulnerability: CVE-2015-3185
  - CVSS Score: 4.3

  - Description: The ap_some_auth_required function in server/request.c in the Apache HTTP Server 2.4.x before 2.4.14 does not consider that a Require directive may be associated with an authorization setting rather than an authentication setting, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging the presence of a module that relies on the 2.2 API behavior.

- Vulnerability: CVE-2015-3184
  - CVSS Score: 5
  - Description: mod_authz_svn in Apache Subversion 1.7.x before 1.7.21 and 1.8.x before 1.8.14, when using Apache httpd 2.4.x, does not properly restrict anonymous access, which allows remote anonymous users to read hidden files via the path name.

- Vulnerability: CVE-2024-4577
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2018-5407
  - CVSS Score: 1.9
  - Description: Simultaneous Multi-threading (SMT) in processors can enable local users to exploit software vulnerable to timing attacks via a side-channel timing attack on 'port contention'.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792

  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2024-0727
  - CVSS Score: N/A
  - Description: Issue summary: Processing a maliciously formatted PKCS12 file may lead OpenSSLto crash leading to a potential Denial of Service attackImpact summary: Applications loading files in the PKCS12 format from untrustedsources might terminate abruptly.A file in PKCS12 format can contain certificates and keys and may come from anuntrusted source. The PKCS12 specification allows certain fields to be NULL, butOpenSSL does not correctly check for this case. This can lead to a NULL pointerdereference that results in OpenSSL crashing. If an application processes PKCS12files from an untrusted source using the OpenSSL APIs then that application willbe vulnerable to this issue.OpenSSL APIs that are vulnerable to this are: PKCS12_parse(),PKCS12_unpack_p7data(), PKCS12_unpack_p7encdata(), PKCS12_unpack_authsafes()and PKCS12_newpass().We have also fixed a similar issue in SMIME_write_PKCS7(). However since thisfunction is related to writing data we do not consider it security significant.The FIPS modules in 3.2, 3.1 and 3.0 are not affected by this issue.
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3

  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2023-0286
  - CVSS Score: N/A
  - Description: There is a type confusion vulnerability relating to X.400 address processinginside an X.509 GeneralName. X.400 addresses were parsed as an ASN1_STRING butthe public structure definition for GENERAL_NAME incorrectly specified the typeof the x400Address field as ASN1_TYPE. This field is subsequently interpreted bythe OpenSSL function GENERAL_NAME_cmp as an ASN1_TYPE rather than anASN1_STRING.When CRL checking is enabled (i.e. the application sets theX509_V_FLAG_CRL_CHECK flag), this vulnerability may allow an attacker to passarbitrary pointers to a memcmp call, enabling them to read memory contents orenact a denial of service. In most cases, the attack requires the attacker toprovide both the certificate chain and CRL, neither of which need to have avalid signature. If the attacker only controls one of these inputs, the otherinput must already contain an X.400 address as a CRL distribution point, whichis uncommon. As such, this vulnerability is most likely to only affectapplications which have implemented their own functionality for retrieving CRLsover a network.

- Vulnerability: CVE-2023-3817
  - CVSS Score: N/A

  - Description: Issue summary: Checking excessively long DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_check(), DH_check_ex()or EVP_PKEY_param_check() to check a DH key or DH parameters may experience longdelays. Where the key or parameters that are being checked have been obtainedfrom an untrusted source this may lead to a Denial of Service.The function DH_check() performs various checks on DH parameters. After fixingCVE-2023-3446 it was discovered that a large q parameter value can also triggeran overly long computation during some of these checks. A correct q value,if present, cannot be larger than the modulus p parameter, thus it isunnecessary to perform these checks if q is larger than p.An application that calls DH_check() and supplies a key or parameters obtainedfrom an untrusted source could be vulnerable to a Denial of Service attack.The function DH_check() is itself called by a number of other OpenSSL functions.An application calling any of those other functions may similarly be affected.The other functions affected by this are DH_check_ex() andEVP_PKEY_param_check().Also vulnerable are the OpenSSL dhparam and pkeyparam command line applicationswhen using the "-check" option.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2023-2650
  - CVSS Score: N/A

  - Description: Issue summary: Processing some specially crafted ASN.1 object identifiers ordata containing them may be very slow.Impact summary: Applications that use OBJ_obj2txt() directly, or use any ofthe OpenSSL subsystems OCSP, PKCS7/SMIME, CMS, CMP/CRMF or TS with no messagesize limit may experience notable to very long delays when processing thosemessages, which may lead to a Denial of Service.An OBJECT IDENTIFIER is composed of a series of numbers - sub-identifiers -most of which have no size limit. OBJ_obj2txt() may be used to translatean ASN.1 OBJECT IDENTIFIER given in DER encoding form (using the OpenSSLtype ASN1_OBJECT) to its canonical numeric text form, which are thesub-identifiers of the OBJECT IDENTIFIER in decimal form, separated byperiods.When one of the sub-identifiers in the OBJECT IDENTIFIER is very large(these are sizes that are seen as absurdly large, taking up tens or hundredsof KiBs), the translation to a decimal number in text may take a very longtime. The time complexity is O(n$\hat{2}$) with 'n' being the size of thesub-identifiers in bytes (*).With OpenSSL 3.0, support to fetch cryptographic algorithms using names /identifiers in string form was introduced. This includes using OBJECTIDENTIFIERs in canonical numeric text form as identifiers for fetchingalgorithms.Such OBJECT IDENTIFIERs may be received through the ASN.1 structureAlgorithmIdentifier, which is commonly used in multiple protocols to specifywhat cryptographic algorithm should be used to sign or verify, encrypt ordecrypt, or digest passed data.Applications that call OBJ_obj2txt() directly with untrusted data areaffected, with any version of OpenSSL. If the use is for the mere purposeof display, the severity is considered low.In OpenSSL 3.0 and newer, this affects the subsystems OCSP, PKCS7/SMIME,CMS, CMP/CRMF or TS. It also impacts anything that processes X.509certificates, including simple things like verifying its signature.The impact on TLS is relatively low, because all versions of OpenSSL have a100KiB limit on the peer's certificate chain. Additionally, this onlyimpacts clients, or servers that have explicitly enabled clientauthentication.In OpenSSL 1.1.1 and 1.0.2, this only affects displaying diverse objects,such as X.509 certificates. This is assumed to not happen in such a waythat it would cause a Denial of Service, so these versions are considerednot affected by this issue in such a way that it would be cause for concern,and the severity is therefore considered low.

- Vulnerability: CVE-2023-0215
  - CVSS Score: N/A

  - Description: The public API function BIO_new_NDEF is a helper function used for streamingASN.1 data via a BIO. It is primarily used internally to OpenSSL to support theSMIME, CMS and PKCS7 streaming capabilities, but may also be called directly byend user applications.The function receives a BIO from the caller, prepends a new BIO_f_asn1 filterBIO onto the front of it to form a BIO chain, and then returns the new head ofthe BIO chain to the caller. Under certain conditions, for example if a CMSrecipient public key is invalid, the new filter BIO is freed and the functionreturns a NULL result indicating a failure. However, in this case, the BIO chainis not properly cleaned up and the BIO passed by the caller still retainsinternal pointers to the previously freed filter BIO. If the caller then goes onto call BIO_pop() on the BIO then a use-after-free will occur. This will mostlikely result in a crash.This scenario occurs directly in the internal function B64_write_ASN1() whichmay cause BIO_new_NDEF() to be called and will subsequently call BIO_pop() onthe BIO. This internal function is in turn called by the public API functionsPEM_write_bio_ASN1_stream, PEM_write_bio_CMS_stream, PEM_write_bio_PKCS7_stream,SMIME_write_ASN1, SMIME_write_CMS and SMIME_write_PKCS7.Other public API functions that may be impacted by this includei2d_ASN1_bio_stream, BIO_new_CMS, BIO_new_PKCS7, i2d_CMS_bio_stream andi2d_PKCS7_bio_stream.The OpenSSL cms and smime command line applications are similarly affected.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2022-31628
  - CVSS Score: N/A
  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the phar uncompressor code would recursively uncompress "quines" gzip files, resulting in an infinite loop.
- Vulnerability: CVE-2022-31629
  - CVSS Score: N/A

  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the vulnerability enables network and same-site attackers to set a standard insecure cookie in the victim's browser which is treated as a '__Host-' or '__Secure-' cookie by PHP applications.

- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.

- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.

- Vulnerability: CVE-2022-4304
  - CVSS Score: N/A
  - Description: A timing based side channel exists in the OpenSSL RSA Decryption implementationwhich could be sufficient to recover a plaintext across a network in aBleichenbacher style attack. To achieve a successful decryption an attackerwould have to be able to send a very large number of trial messages fordecryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5,RSA-OEAP and RSASVE.For example, in a TLS connection, RSA is commonly used by a client to send anencrypted pre-master secret to the server. An attacker that had observed agenuine connection between a client and a server could use this flaw to sendtrial messages to the server and record the time taken to process them. After asufficiently large number of messages the attacker could recover the pre-mastersecret used for the original connection and thus be able to decrypt theapplication data sent over that connection.

- Vulnerability: CVE-2018-19396
  - CVSS Score: 5
  - Description: ext/standard/var_unserializer.c in PHP 5.x through 7.1.24 allows attackers to cause a denial of service (application crash) via an unserialize call for the com, dotnet, or variant class.

- Vulnerability: CVE-2018-19395
  - CVSS Score: 5
  - Description: ext/standard/var.c in PHP 5.x through 7.1.24 on Windows allows attackers to cause a denial of service (NULL pointer dereference and application crash) because com and com_safearray_proxy return NULL in com_properties_get in ext/com_dotnet/com_handlers.c, as demonstrated by a serialize call on COM("WScript.Shell").

- Vulnerability: CVE-2017-8923
  - CVSS Score: 7.5
  - Description: The zend_string_extend function in Zend/zend_string.h in PHP through 7.1.5 does not prevent changes to string objects that result in a negative length, which allows remote attackers to cause a denial of service (application crash) or possibly have unspecified other impact by leveraging a script's use of .= with a long string.

- Vulnerability: CVE-2019-1563
  - CVSS Score: 4.3
  - Description: In situations where an attacker receives automated notification of the success or failure of a decryption attempt an attacker, after sending a very large number of messages to be decrypted, can recover a CMS/PKCS7 transported encryption key or decrypt any RSA encrypted message that was encrypted with the public RSA key, using a Bleichenbacher padding oracle attack. Applications are not affected if they use a certificate together with the private RSA key to the CMS_decrypt or PKCS7_decrypt functions to select the correct recipient info to decrypt. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2014-3523
  - CVSS Score: 5
  - Description: Memory leak in the winnt_accept function in server/mpm/winnt/child.c in the WinNT MPM in the Apache HTTP Server 2.4.x before 2.4.10 on Windows, when the default AcceptFilter is enabled, allows remote attackers to cause a denial of service (memory consumption) via crafted requests.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2019-9639
  - CVSS Score: 5
  - Description: An issue was discovered in the EXIF component in PHP before 7.1.27, 7.2.x before 7.2.16, and 7.3.x before 7.3.3. There is an uninitialized read in exif_process_IFD_in_MAKERNOTE because of mishandling the data_len variable.
- Vulnerability: CVE-2019-9638
  - CVSS Score: 5
  - Description: An issue was discovered in the EXIF component in PHP before 7.1.27, 7.2.x before 7.2.16, and 7.3.x before 7.3.3. There is an uninitialized read in exif_process_IFD_in_MAKERNOTE because of mishandling the maker_note->offset relationship to value_len.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.
- Vulnerability: CVE-2019-9637
  - CVSS Score: 5
  - Description: An issue was discovered in PHP before 7.1.27, 7.2.x before 7.2.16, and 7.3.x before 7.3.3. Due to the way rename() across filesystems is implemented, it is possible that file being renamed is briefly available with wrong permissions while the rename is ongoing, thus enabling unauthorized users to access the data.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2017-7963
  - CVSS Score: 5

  - Description: The GNU Multiple Precision Arithmetic Library (GMP) interfaces for PHP through 7.1.4 allow attackers to cause a denial of service (memory consumption and application crash) via operations on long strings. NOTE: the vendor disputes this, stating "There is no security issue here, because GMP safely aborts in case of an OOM condition. The only attack vector here is denial of service. However, if you allow attacker-controlled, unbounded allocations you have a DoS vector regardless of GMP's OOM behavior.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2014-3581
  - CVSS Score: 5
  - Description: The cache_merge_headers_out function in modules/cache/cache_util.c in the mod_cache module in the Apache HTTP Server before 2.4.11 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an empty HTTP Content-Type header.

- Vulnerability: CVE-2016-0736
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, mod_session_crypto was encrypting its data/cookie using the configured ciphers with possibly either CBC or ECB modes of operation (AES256-CBC by default), hence no selectable or builtin authenticated encryption. This made it vulnerable to padding oracle attacks, particularly with CBC.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5

  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.
- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.
- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8
  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.
- Vulnerability: CVE-2022-2068
  - CVSS Score: 10
  - Description: In addition to the c_rehash shell command injection identified in CVE-2022-1292, further circumstances where the c_rehash script does not properly sanitise shell metacharacters to prevent command injection were found by code review. When the CVE-2022-1292 was fixed it was not discovered that there are other places in the script where the file names of certificates being hashed were possibly passed to a command executed through the shell. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.4 (Affected 3.0.0,3.0.1,3.0.2,3.0.3). Fixed in OpenSSL 1.1.1p (Affected 1.1.1-1.1.1o). Fixed in OpenSSL 1.0.2zf (Affected 1.0.2-1.0.2ze).
- Vulnerability: CVE-2009-3766

  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.16 and other versions before 1.5.19, when OpenSSL is used, does not verify the domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof SSL servers via an arbitrary valid certificate.

- Vulnerability: CVE-2009-3767
  - CVSS Score: 4.3
  - Description: libraries/libldap/tls_o.c in OpenLDAP 2.2 and 2.4, and possibly other versions, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2009-3765
  - CVSS Score: 6.8
  - Description: mutt_ssl.c in mutt 1.5.19 and 1.5.20, when OpenSSL is used, does not properly handle a '\{}0' character in a domain name in the subject's Common Name (CN) field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2021-3712
  - CVSS Score: 5.8

  - Description: ASN.1 strings are represented internally within OpenSSL as an ASN1_STRING structure which contains a buffer holding the string data and a field holding the buffer length. This contrasts with normal C strings which are repesented as a buffer for the string data which is terminated with a NUL (0) byte. Although not a strict requirement, ASN.1 strings that are parsed using OpenSSL's own "d2i" functions (and other similar parsing functions) as well as any string whose value has been set with the ASN1_STRING_set() function will additionally NUL terminate the byte array in the ASN1_STRING structure. However, it is possible for applications to directly construct valid ASN1_STRING structures which do not NUL terminate the byte array by directly setting the "data" and "length" fields in the ASN1_STRING array. This can also happen by using the ASN1_STRING_set0() function. Numerous OpenSSL functions that print ASN.1 data have been found to assume that the ASN1_STRING byte array will be NUL terminated, even though this is not guaranteed for strings that have been directly constructed. Where an application requests an ASN.1 structure to be printed, and where that ASN.1 structure contains ASN1_STRINGs that have been directly constructed by the application without NUL terminating the "data" field, then a read buffer overrun can occur. The same thing can also occur during name constraints processing of certificates (for example if a certificate has been directly constructed by the application instead of loading it via the OpenSSL parsing functions, and the certificate contains non NUL terminated ASN1_STRING structures). It can also occur in the X509_get1_email(), X509_REQ_get1_email() and X509_get1_ocsp() functions. If a malicious actor can cause an application to directly construct an ASN1_STRING and then process it through one of the affected OpenSSL functions then this issue could be hit. This might result in a crash (causing a Denial of Service attack). It could also result in the disclosure of private memory contents (such as private keys, or sensitive plaintext). Fixed in OpenSSL 1.1.1l (Affected 1.1.1-1.1.1k). Fixed in OpenSSL 1.0.2za (Affected 1.0.2-1.0.2y).

- Vulnerability: CVE-2023-0464
  - CVSS Score: N/A
  - Description: A security vulnerability has been identified in all supported versionsof OpenSSL related to the verification of X.509 certificate chainsthat include policy constraints. Attackers may be able to exploit thisvulnerability by creating a malicious certificate chain that triggersexponential use of computational resources, leading to a denial-of-service(DoS) attack on affected systems.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.
- Vulnerability: CVE-2023-0465
  - CVSS Score: N/A

  - Description: Applications that use a non-default option when verifying certificates may bevulnerable to an attack from a malicious CA to circumvent certain checks.Invalid certificate policies in leaf certificates are silently ignored byOpenSSL and other certificate policy checks are skipped for that certificate.A malicious CA could use this to deliberately assert invalid certificate policiesin order to circumvent policy checking on the certificate altogether.Policy processing is disabled by default but can be enabled by passingthe '-policy' argument to the command line utilities or by calling the'X509_VERIFY_PARAM_set1_policies()' function.

- Vulnerability: CVE-2023-0466
  - CVSS Score: N/A
  - Description: The function X509_VERIFY_PARAM_add0_policy() is documented toimplicitly enable the certificate policy check when doing certificateverification. However the implementation of the function does notenable the check which allows certificates with invalid or incorrectpolicies to pass the certificate verification.As suddenly enabling the policy check could break existing deployments it wasdecided to keep the existing behavior of the X509_VERIFY_PARAM_add0_policy()function.Instead the applications that require OpenSSL to perform certificatepolicy check need to use X509_VERIFY_PARAM_set1_policies() or explicitlyenable the policy check by calling X509_VERIFY_PARAM_set_flags() withthe X509_V_FLAG_POLICY_CHECK flag argument.Certificate policy checks are disabled by default in OpenSSL and are notcommonly used by applications.

- Vulnerability: CVE-2015-9253
  - CVSS Score: 6.8
  - Description: An issue was discovered in PHP 7.3.x before 7.3.0alpha3, 7.2.x before 7.2.8, and before 7.1.20. The php-fpm master process restarts a child process in an endless loop when using program execution functions (e.g., passthru, exec, shell_exec, or system) with a non-blocking STDIN stream, causing this master process to consume 100% of the CPU, and consume disk space with a large volume of error logs, as demonstrated by an attack by a customer of a shared-hosting facility.

- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.

- Vulnerability: CVE-2016-5387
  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2021-23840
  - CVSS Score: 5
  - Description: Calls to EVP_CipherUpdate, EVP_EncryptUpdate and EVP_DecryptUpdate may overflow the output length argument in some cases where the input length is close to the maximum permissable length for an integer on the platform. In such cases the return value from the function call will be 1 (indicating success), but the output length value will be negative. This could cause applications to behave incorrectly or crash. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).
- Vulnerability: CVE-2021-23841
  - CVSS Score: 4.3

  - Description: The OpenSSL public API function X509_issuer_and_serial_hash() attempts to create a unique hash value based on the issuer and serial number data contained within an X509 certificate. However it fails to correctly handle any errors that may occur while parsing the issuer field (which might occur if the issuer field is maliciously constructed). This may subsequently result in a NULL pointer deref and a crash leading to a potential denial of service attack. The function X509_issuer_and_serial_hash() is never directly called by OpenSSL itself so applications are only vulnerable if they use this function directly and they use it on certificates that may have been obtained from untrusted sources. OpenSSL versions 1.1.1i and below are affected by this issue. Users of these versions should upgrade to OpenSSL 1.1.1j. OpenSSL versions 1.0.2x and below are affected by this issue. However OpenSSL 1.0.2 is out of support and no longer receiving public updates. Premium support customers of OpenSSL 1.0.2 should upgrade to 1.0.2y. Other users should upgrade to 1.1.1j. Fixed in OpenSSL 1.1.1j (Affected 1.1.1-1.1.1i). Fixed in OpenSSL 1.0.2y (Affected 1.0.2-1.0.2x).

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2020-1968
  - CVSS Score: 4.3
  - Description: The Raccoon attack exploits a flaw in the TLS specification which can lead to an attacker being able to compute the pre-master secret in connections which have used a Diffie-Hellman (DH) based ciphersuite. In such a case this would result in the attacker being able to eavesdrop on all encrypted communications sent over that TLS connection. The attack can only be exploited if an implementation re-uses a DH secret across multiple TLS connections. Note that this issue only impacts DH ciphersuites and not ECDH ciphersuites. This issue affects OpenSSL 1.0.2 which is out of support and no longer receiving public updates. OpenSSL 1.1.1 is not vulnerable to this issue. Fixed in OpenSSL 1.0.2w (Affected 1.0.2-1.0.2v).
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690

  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2020-11985
  - CVSS Score: 4.3
  - Description: IP address spoofing when proxying using mod_remoteip and mod_rewrite For configurations using proxying with mod_remoteip and certain mod_rewrite rules, an attacker could spoof their IP address for logging and PHP scripts. Note this issue was fixed in Apache HTTP Server 2.4.24 but was retrospectively allocated a low severity CVE in 2020.
- Vulnerability: CVE-2021-4160
  - CVSS Score: 4.3
  - Description: There is a carry propagation bug in the MIPS32 and MIPS64 squaring procedure. Many EC algorithms are affected, including some of the TLS 1.3 default curves. Impact was not analyzed in detail, because the pre-requisites for attack are considered unlikely and include reusing private keys. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH private key among multiple clients, which is no longer an option since CVE-2016-0701. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0.0. It was addressed in the releases of 1.1.1m and 3.0.1 on the 15th of December 2021. For the 1.0.2 release it is addressed in git commit 6fc1aaaf3 that is available to premium support customers only. It will be made available in 1.0.2zc when it is released. The issue only affects OpenSSL on MIPS platforms. Fixed in OpenSSL 3.0.1 (Affected 3.0.0). Fixed in OpenSSL 1.1.1m (Affected 1.1.1-1.1.1l). Fixed in OpenSSL 1.0.2zc-dev (Affected 1.0.2-1.0.2zb).
- Vulnerability: CVE-2013-4352
  - CVSS Score: 4.3

  - Description: The cache_invalidate function in modules/cache/cache_storage.c in the mod_cache module in the Apache HTTP Server 2.4.6, when a caching forward proxy is enabled, allows remote HTTP servers to cause a denial of service (NULL pointer dereference and daemon crash) via vectors that trigger a missing hostname value.

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2019-9641
  - CVSS Score: 7.5
  - Description: An issue was discovered in the EXIF component in PHP before 7.1.27, 7.2.x before 7.2.16, and 7.3.x before 7.3.3. There is an uninitialized read in exif_process_IFD_in_TIFF.

- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-0778
  - CVSS Score: 5

  - Description: The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. Internally this function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form. It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Since certificate parsing happens prior to verification of the certificate signature, any process that parses an externally supplied certificate may thus be subject to a denial of service attack. The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Thus vulnerable situations include: - TLS clients consuming server certificates - TLS servers consuming client certificates - Hosting providers taking certificates or private keys from customers - Certificate authorities parsing certification requests from subscribers - Anything else which parses ASN.1 elliptic curve parameters Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue. In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However any operation which requires the public key from the certificate will trigger the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

- Vulnerability: CVE-2020-1971
  - CVSS Score: 4.3

  - Description: The X.509 GeneralName type is a generic type for representing different types of names. One of those name types is known as EDIPartyName. OpenSSL provides a function GENERAL_NAME_cmp which compares different instances of a GENERAL_NAME to see if they are equal or not. This function behaves incorrectly when both GENERAL_NAMEs contain an EDIPARTYNAME. A NULL pointer dereference and a crash may occur leading to a possible denial of service attack. OpenSSL itself uses the GENERAL_NAME_cmp function for two purposes: 1) Comparing CRL distribution point names between an available CRL and a CRL distribution point embedded in an X509 certificate 2) When verifying that a timestamp response token signer matches the timestamp authority name (exposed via the API functions TS_RESP_verify_response and TS_RESP_verify_token) If an attacker can control both items being compared then that attacker could trigger a crash. For example if the attacker can trick a client or server into checking a malicious certificate against a malicious CRL then this may occur. Note that some applications automatically download CRLs based on a URL embedded in a certificate. This checking happens prior to the signatures on the certificate and CRL being verified. OpenSSL's s_server, s_client and verify tools have support for the "-crl_download" option which implements automatic CRL downloading and this attack has been demonstrated to work against those tools. Note that an unrelated bug means that affected versions of OpenSSL cannot parse or construct correct encodings of EDIPARTYNAME. However it is possible to construct a malformed EDIPARTYNAME that OpenSSL's parser will accept and hence trigger this attack. All OpenSSL 1.1.1 and 1.0.2 versions are affected by this issue. Other OpenSSL releases are out of support and have not been checked. Fixed in OpenSSL 1.1.1i (Affected 1.1.1-1.1.1h). Fixed in OpenSSL 1.0.2x (Affected 1.0.2-1.0.2w).

- Vulnerability: CVE-2009-1390
  - CVSS Score: 6.8
  - Description: Mutt 1.5.19, when linked against (1) OpenSSL (mutt_ssl.c) or (2) GnuTLS (mutt_ssl_gnutls.c), allows connections when only one TLS certificate in the chain is accepted instead of verifying the entire chain, which allows remote attackers to spoof trusted servers via a man-in-the-middle attack.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2023-5678
  - CVSS Score: N/A

  - Description: Issue summary: Generating excessively long X9.42 DH keys or checkingexcessively long X9.42 DH keys or parameters may be very slow.Impact summary: Applications that use the functions DH_generate_key() togenerate an X9.42 DH key may experience long delays. Likewise, applicationsthat use DH_check_pub_key(), DH_check_pub_key_ex() or EVP_PKEY_public_check()to check an X9.42 DH key or X9.42 DH parameters may experience long delays.Where the key or parameters that are being checked have been obtained froman untrusted source this may lead to a Denial of Service.While DH_check() performs all the necessary checks (as of CVE-2023-3817),DH_check_pub_key() doesn't make any of these checks, and is thereforevulnerable for excessively large P and Q parameters.Likewise, while DH_generate_key() performs a check for an excessively largeP, it doesn't check for an excessively large Q.An application that calls DH_generate_key() or DH_check_pub_key() andsupplies a key or parameters obtained from an untrusted source could bevulnerable to a Denial of Service attack.DH_generate_key() and DH_check_pub_key() are also called by a number ofother OpenSSL functions. An application calling any of those otherfunctions may similarly be affected. The other functions affected by thisare DH_check_pub_key_ex(), EVP_PKEY_public_check(), and EVP_PKEY_generate().Also vulnerable are the OpenSSL pkey command line application when using the"-pubcheck" option, as well as the OpenSSL genpkey command line application.The OpenSSL SSL/TLS implementation is not affected by this issue.The OpenSSL 3.0 and 3.1 FIPS providers are not affected by this issue.

- Vulnerability: CVE-2017-3736
  - CVSS Score: 4
  - Description: There is a carry propagating bug in the x86_64 Montgomery squaring procedure in OpenSSL before 1.0.2m and 1.1.0 before 1.1.0g. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH are considered just feasible (although very difficult) because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be very significant and likely only accessible to a limited number of attackers. An attacker would additionally need online access to an unpatched system using the target private key in a scenario with persistent DH parameters and a private key that is shared between multiple clients. This only affects processors that support the BMI1, BMI2 and ADX extensions like Intel Broadwell (5th generation) and later or AMD Ryzen.
- Vulnerability: CVE-2017-3737
  - CVSS Score: 4.3

  - Description: OpenSSL 1.0.2 (starting from version 1.0.2b) introduced an "error state" mechanism. The intent was that if a fatal error occurred during a handshake then OpenSSL would move into the error state and would immediately fail if you attempted to continue the handshake. This works as designed for the explicit handshake functions (SSL_do_handshake(), SSL_accept() and SSL_connect()), however due to a bug it does not work correctly if SSL_read() or SSL_write() is called directly. In that scenario, if the handshake fails then a fatal error will be returned in the initial function call. If SSL_read()/SSL_write() is subsequently called by the application for the same SSL object then it will succeed and the data is passed without being decrypted/encrypted directly from the SSL/TLS record layer. In order to exploit this issue an application bug would have to be present that resulted in a call to SSL_read()/SSL_write() being issued after having already received a fatal error. OpenSSL version 1.0.2b-1.0.2m are affected. Fixed in OpenSSL 1.0.2n. OpenSSL 1.1.0 is not affected.

- Vulnerability: CVE-2019-1547
  - CVSS Score: 1.9
  - Description: Normally in OpenSSL EC groups always have a co-factor present and this is used in side channel resistant code paths. However, in some cases, it is possible to construct a group using explicit parameters (instead of using a named curve). In those cases it is possible that such a group does not have the cofactor present. This can occur even where all the parameters match a known named curve. If such a curve is used then OpenSSL falls back to non-side channel resistant code paths which may result in full key recovery during an ECDSA signature operation. In order to be vulnerable an attacker would have to have the ability to time the creation of a large number of signatures where explicit parameters with no co-factor present are in use by an application using libcrypto. For the avoidance of doubt libssl is not vulnerable because explicit parameters are never used. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).
- Vulnerability: CVE-2017-3735
  - CVSS Score: 5
  - Description: While parsing an IPAddressFamily extension in an X.509 certificate, it is possible to do a one-byte overread. This would result in an incorrect text display of the certificate. This bug has been present since 2006 and is present in all versions of OpenSSL before 1.0.2m and 1.1.0g.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2022-1292
  - CVSS Score: 10

  - Description: The c_rehash script does not properly sanitise shell metacharacters to prevent command injection. This script is distributed by some operating systems in a manner where it is automatically executed. On such operating systems, an attacker could execute arbitrary commands with the privileges of the script. Use of the c_rehash script is considered obsolete and should be replaced by the OpenSSL rehash command line tool. Fixed in OpenSSL 3.0.3 (Affected 3.0.0,3.0.1,3.0.2). Fixed in OpenSSL 1.1.1o (Affected 1.1.1-1.1.1n). Fixed in OpenSSL 1.0.2ze (Affected 1.0.2-1.0.2zd).

- Vulnerability: CVE-2017-3738
  - CVSS Score: 4.3
  - Description: There is an overflow bug in the AVX2 Montgomery multiplication procedure used in exponentiation with 1024-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against RSA and DSA as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH1024 are considered just feasible, because most of the work necessary to deduce information about a private key may be performed offline. The amount of resources required for such an attack would be significant. However, for an attack on TLS to be meaningful, the server would have to share the DH1024 private key among multiple clients, which is no longer an option since CVE-2016-0701. This only affects processors that support the AVX2 but not ADX extensions like Intel Haswell (4th generation). Note: The impact from this issue is similar to CVE-2017-3736, CVE-2017-3732 and CVE-2015-3193. OpenSSL version 1.0.2-1.0.2m and 1.1.0-1.1.0g are affected. Fixed in OpenSSL 1.0.2n. Due to the low severity of this issue we are not issuing a new release of OpenSSL 1.1.0 at this time. The fix will be included in OpenSSL 1.1.0h when it becomes available. The fix is also available in commit e502cc86d in the OpenSSL git repository.

- Vulnerability: CVE-2020-11579
  - CVSS Score: 5
  - Description: An issue was discovered in Chadha PHPKB 9.0 Enterprise Edition. installer/test-connection.php (part of the installation process) allows a remote unauthenticated attacker to disclose local files on hosts running PHP before 7.2.16, or on hosts where the MySQL ALLOW LOCAL DATA INFILE option is enabled.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2018-17199
  - CVSS Score: 5

  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.

- Vulnerability: CVE-2018-0737
  - CVSS Score: 4.3
  - Description: The OpenSSL RSA Key generation algorithm has been shown to be vulnerable to a cache timing side channel attack. An attacker with sufficient access to mount cache timing attacks during the RSA key generation process could recover the private key. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2b-1.0.2o).
- Vulnerability: CVE-2018-0734
  - CVSS Score: 4.3
  - Description: The OpenSSL DSA signature algorithm has been shown to be vulnerable to a timing side channel attack. An attacker could use variations in the signing algorithm to recover the private key. Fixed in OpenSSL 1.1.1a (Affected 1.1.1). Fixed in OpenSSL 1.1.0j (Affected 1.1.0-1.1.0i). Fixed in OpenSSL 1.0.2q (Affected 1.0.2-1.0.2p).
- Vulnerability: CVE-2018-0732
  - CVSS Score: 5
  - Description: During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack. Fixed in OpenSSL 1.1.0i-dev (Affected 1.1.0-1.1.0h). Fixed in OpenSSL 1.0.2p-dev (Affected 1.0.2-1.0.2o).
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2018-0739
  - CVSS Score: 4.3
  - Description: Constructed ASN.1 types with a recursive definition (such as can be found in PKCS7) could eventually exceed the stack given malicious input with excessive recursion. This could result in a Denial Of Service attack. There are no such structures used within SSL/TLS that come from untrusted sources so this is considered safe. Fixed in OpenSSL 1.1.0h (Affected 1.1.0-1.1.0g). Fixed in OpenSSL 1.0.2o (Affected 1.0.2b-1.0.2n).
- Vulnerability: CVE-2014-8109
  - CVSS Score: 4.3

  - Description: mod_lua.c in the mod_lua module in the Apache HTTP Server 2.3.x and 2.4.x through 2.4.10 does not support an httpd configuration in which the same Lua authorization provider is used with different arguments within different contexts, which allows remote attackers to bypass intended access restrictions in opportunistic circumstances by leveraging multiple Require directives, as demonstrated by a configuration that specifies authorization for one group to access a certain directory, and authorization for a second group to access a second directory.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2016-2161
  - CVSS Score: 5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.23, malicious input to mod_auth_digest can cause the server to crash, and each instance continues to crash even for subsequently valid requests.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2019-1552
  - CVSS Score: 1.9

  - Description: OpenSSL has internal defaults for a directory tree where it can find a configuration file as well as certificates used for verification in TLS. This directory is most commonly referred to as OPENSSLDIR, and is configurable with the --prefix / --openssldir configuration options. For OpenSSL versions 1.1.0 and 1.1.1, the mingw configuration targets assume that resulting programs and libraries are installed in a Unix-like environment and the default prefix for program installation as well as for OPENSSLDIR should be '/usr/local'. However, mingw programs are Windows programs, and as such, find themselves looking at sub-directories of 'C:/usr/local', which may be world writable, which enables untrusted users to modify OpenSSL's default configuration, insert CA certificates, modify (or even replace) existing engine modules, etc. For OpenSSL 1.0.2, '/usr/local/ssl' is used as default for OPENSSLDIR on all Unix and Windows targets, including Visual C builds. However, some build instructions for the diverse Windows targets on 1.0.2 encourage you to specify your own --prefix. OpenSSL versions 1.1.1, 1.1.0 and 1.0.2 are affected by this issue. Due to the limited scope of affected deployments this has been assessed as low severity and therefore we are not creating new releases at this time. Fixed in OpenSSL 1.1.1d (Affected 1.1.1-1.1.1c). Fixed in OpenSSL 1.1.0l (Affected 1.1.0-1.1.0k). Fixed in OpenSSL 1.0.2t (Affected 1.0.2-1.0.2s).

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2019-1551
  - CVSS Score: 5
  - Description: There is an overflow bug in the x64_64 Montgomery squaring procedure used in exponentiation with 512-bit moduli. No EC algorithms are affected. Analysis suggests that attacks against 2-prime RSA1024, 3-prime RSA1536, and DSA1024 as a result of this defect would be very difficult to perform and are not believed likely. Attacks against DH512 are considered just feasible. However, for an attack the target would have to re-use the DH512 private key, which is not recommended anyway. Also applications directly using the low level API BN_mod_exp may be affected if they use BN_FLG_CONSTTIME. Fixed in OpenSSL 1.1.1e (Affected 1.1.1-1.1.1d). Fixed in OpenSSL 1.0.2u (Affected 1.0.2-1.0.2t).
- Vulnerability: CVE-2019-1559
  - CVSS Score: 4.3

  - Description: If an application encounters a fatal protocol error and then calls SSL_shutdown() twice (once to send a close_notify, and once to receive one) then OpenSSL can respond differently to the calling application if a 0 byte record is received with invalid padding compared to if a 0 byte record is received with an invalid MAC. If the application then behaves differently based on that in a way that is detectable to the remote peer, then this amounts to a padding oracle that could be used to decrypt data. In order for this to be exploitable "non-stitched" ciphersuites must be in use. Stitched ciphersuites are optimised implementations of certain commonly used ciphersuites. Also the application must call SSL_shutdown() twice even if a protocol error has occurred (applications should not do this but some do anyway). Fixed in OpenSSL 1.0.2r (Affected 1.0.2-1.0.2q).

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2022-28615

  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.113 IP Address: 159.149.133.61

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 22
- Medium Vulnerabilities: 100
- Low Vulnerabilities: 8
- Total Vulnerabilities: 130

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.29
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.29
  - Location: /
- Service: N/A
  - Port: 10001
  - Version: N/A
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-1333
  - CVSS Score: 5
  - Description: By specially crafting HTTP/2 requests, workers would be allocated 60 seconds longer than necessary, leading to worker exhaustion and a denial of service. Fixed in Apache HTTP Server 2.4.34 (Affected 2.4.18-2.4.30,2.4.33).
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2018-11763
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.17 to 2.4.34, by sending continuous, large SETTINGS frames a client can occupy a connection, server thread and CPU time without any connection timeout coming to effect. This affects only HTTP/2 connections. A possible mitigation is to not enable the h2 protocol.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792

  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.

- Vulnerability: CVE-2019-0211

  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3
  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8
  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.
- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.
- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.
- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.
- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.

- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490

  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the 'Cache-Digest' header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service

- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5

  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows

- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.

- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5
  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4

  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2019-0220
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.0 to 2.4.38. When the path component of a request URL contains multiple consecutive slashes ('/'), directives such as LocationMatch and RewriteRule must account for duplicates in regular expressions while other aspects of the servers processing will implicitly collapse them.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2018-14040
  - CVSS Score: 4.3
  - Description: In Bootstrap before 4.1.2, XSS is possible in the collapse data-parent attribute.
- Vulnerability: CVE-2018-17189
  - CVSS Score: 5
  - Description: In Apache HTTP server versions 2.4.37 and prior, by sending request bodies in a slow loris way to plain resources, the h2 stream for that request unnecessarily occupied a server thread cleaning up that incoming data. This affects only HTTP/2 (mod_http2) connections.
- Vulnerability: CVE-2018-14042
  - CVSS Score: 4.3
  - Description: In Bootstrap before 4.1.2, XSS is possible in the data-container property of tooltip.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8

  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow

- Vulnerability: CVE-2016-10735
  - CVSS Score: 4.3
  - Description: In Bootstrap 3.x before 3.4.0 and 4.x-beta before 4.0.0-beta.2, XSS is possible in the data-target attribute, a different vulnerability than CVE-2018-14041.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2018-1333
  - CVSS Score: 5
  - Description: By specially crafting HTTP/2 requests, workers would be allocated 60 seconds longer than necessary, leading to worker exhaustion and a denial of service. Fixed in Apache HTTP Server 2.4.34 (Affected 2.4.18-2.4.30,2.4.33).
- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2018-11763
  - CVSS Score: 4.3

  - Description: In Apache HTTP Server 2.4.17 to 2.4.34, by sending continuous, large SETTINGS frames a client can occupy a connection, server thread and CPU time without any connection timeout coming to effect. This affects only HTTP/2 connections. A possible mitigation is to not enable the h2 protocol.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2019-9517
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to unconstrained interal data buffering, potentially leading to a denial of service. The attacker opens the HTTP/2 window so the peer can send without constraint; however, they leave the TCP window closed so the peer cannot actually write (many of) the bytes on the wire. The attacker then sends a stream of requests for a large response object. Depending on how the servers queue the responses, this can consume excess memory, CPU, or both.

- Vulnerability: CVE-2024-38476

  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.
- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.
- Vulnerability: CVE-2019-0196
  - CVSS Score: 5
  - Description: A vulnerability was found in Apache HTTP Server 2.4.17 to 2.4.38. Using fuzzed network input, the http/2 request handling could be made to access freed memory in string comparison when determining the method of a request and thus process the request incorrectly.
- Vulnerability: CVE-2019-0211
  - CVSS Score: 7.2
  - Description: In Apache HTTP Server 2.4 releases 2.4.17 to 2.4.38, with MPM event, worker or prefork, code executing in less-privileged child processes or threads (including scripts executed by an in-process scripting interpreter) could execute arbitrary code with the privileges of the parent process (usually root) by manipulating the scoreboard. Non-Unix systems are not affected.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2019-10092
  - CVSS Score: 4.3

  - Description: In Apache HTTP Server 2.4.0-2.4.39, a limited cross-site scripting issue was reported affecting the mod_proxy error page. An attacker could cause the link on the error page to be malformed and instead point to a page of their choice. This would only be exploitable where a server was set up with proxying enabled but was misconfigured in such a way that the Proxy Error page was displayed.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2019-8331
  - CVSS Score: 4.3
  - Description: In Bootstrap before 3.4.1 and 4.3.x before 4.3.1, XSS is possible in the tooltip or popover data-template attribute.

- Vulnerability: CVE-2017-15715
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.4.0 to 2.4.29, the expression specified in <FilesMatch> could match '$' to a newline character in a malicious filename, rather than matching only the end of the filename. This could be exploited in environments where uploads of some files are are externally blocked, but only by matching the trailing portion of the filename.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.

- Vulnerability: CVE-2019-10098
  - CVSS Score: 5.8

  - Description: In Apache HTTP server 2.4.0 to 2.4.39, Redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an unexpected URL within the request URL.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2018-20677
  - CVSS Score: 4.3
  - Description: In Bootstrap before 3.4.0, XSS is possible in the affix configuration target property.

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2020-1934
  - CVSS Score: 5

  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.

- Vulnerability: CVE-2018-17199
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4 release 2.4.37 and prior, mod_session checks the session expiry time before decoding the session. This causes session expiry time to be ignored for mod_session_cookie sessions since the expiry time is loaded when the session is decoded.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2017-15710
  - CVSS Score: 5
  - Description: In Apache httpd 2.0.23 to 2.0.65, 2.2.0 to 2.2.34, and 2.4.0 to 2.4.29, mod_authnz_ldap, if configured with AuthLDAPCharsetConfig, uses the Accept-Language header value to lookup the right charset encoding when verifying the user's credentials. If the header value is not present in the charset conversion table, a fallback mechanism is used to truncate it to a two characters value to allow a quick retry (for example, 'en-US' is truncated to 'en'). A header value of less than two characters forces an out of bound write of one NUL byte to a memory location that is not part of the string. In the worst case, quite unlikely, the process would crash which could be used as a Denial of Service attack. In the more likely case, this memory is already reserved for future use and the issue has no effect at all.

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.

- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.

- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.

- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, `oidc_validate_redirect_url()` does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring `mod_auth_openidc` to only allow redirection whose destination matches a given regular expression.
- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (`OIDCCacheEncrypt off`, `OIDCSessionType server-cache`, `OIDCCacheType redis`), `mod_auth_openidc` wrongly performed argument interpolation before passing Redis requests to `hiredis`, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the `hiredis` API. As a workaround, this vulnerability can be mitigated by setting `OIDCCacheEncrypt` to `on`, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the 'Cache-Digest' header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows
- Vulnerability: CVE-2019-10081
  - CVSS Score: 5
  - Description: HTTP/2 (2.4.20 through 2.4.39) very early pushes, for example configured with "H2PushResource", could lead to an overwrite of memory in the pushing request's pool, leading to crashes. The memory copied is that of the configured push link header values, not data supplied by the client.
- Vulnerability: CVE-2018-1283
  - CVSS Score: 3.5

  - Description: In Apache httpd 2.4.0 to 2.4.29, when mod_session is configured to forward its session data to CGI applications (SessionEnv on, not the default), a remote user may influence their content by using a "Session" header. This comes from the "HTTP_SESSION" variable name used by mod_session to forward its data to CGIs, since the prefix "HTTP_" is also used by the Apache HTTP Server to pass HTTP header fields, per CGI specifications.

- Vulnerability: CVE-2019-10082
  - CVSS Score: 6.4
  - Description: In Apache HTTP Server 2.4.18-2.4.39, using fuzzed network input, the http/2 session handling could be made to read memory after being freed, during connection shutdown.

- Vulnerability: CVE-2018-1312
  - CVSS Score: 6.8
  - Description: In Apache httpd 2.2.0 to 2.4.29, when generating an HTTP Digest authentication challenge, the nonce sent to prevent reply attacks was not correctly generated using a pseudo-random seed. In a cluster of servers using a common Digest authentication configuration, HTTP requests could be replayed across servers by an attacker without detection.

- Vulnerability: CVE-2018-20676
  - CVSS Score: 4.3
  - Description: In Bootstrap before 3.4.0, XSS is possible in the tooltip data-viewport attribute.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2019-0217
  - CVSS Score: 6
  - Description: In Apache HTTP Server 2.4 release 2.4.38 and prior, a race condition in mod_auth_digest when running in a threaded server could allow a user with valid credentials to authenticate using another username, bypassing configured access control restrictions.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

11.114 IP Address: 88.99.2.212

- Organization: Hetzner Online GmbH
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 443
  - Version: N/A
  - Location:

No vulnerabilities found for this IP address.

11.115 IP Address: 159.149.130.136

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 6
- Medium Vulnerabilities: 17
- Low Vulnerabilities: 5
- Total Vulnerabilities: 29

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.7
  - Location:
- Service: Postfix smtpd
  - Port: 25
  - Version: N/A
  - Location:
- Service: Apache httpd
  - Port: 80
  - Version: 2.4.62
  - Location: https://159.149.130.136/
- Service: Postfix smtpd
  - Port: 465
  - Version: N/A
  - Location:
- Service: Postfix smtpd
  - Port: 587
  - Version: N/A
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2016-20012
  - CVSS Score: 4.3
  - Description: OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session. NOTE: the vendor does not recognize user enumeration as a vulnerability for this product
- Vulnerability: CVE-2021-36368
  - CVSS Score: 2.6

  - Description: An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf. NOTE: the vendor's position is "this is not an authentication bypass, since nothing is being bypassed.

- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.
- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.
- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2021-41617
  - CVSS Score: 4.4
  - Description: sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.
- Vulnerability: CVE-2023-51385

  - CVSS Score: N/A
  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.
- Vulnerability: CVE-2024-6387
  - CVSS Score: N/A
  - Description: A security regression (CVE-2006-5051) was discovered in OpenSSH's server (sshd). There is a race condition which can lead sshd to handle some signals in an unsafe manner. An unauthenticated, remote attacker may be able to trigger it by failing to authenticate within a set time period.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2011-2688

  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1

  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5

  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

11.116 IP Address: 159.149.53.250

- Organization: UNI-Milano
- Operating System: Windows
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 2
- Low Vulnerabilities: 0
- Total Vulnerabilities: 2

Services Running on IP Address

- Service: Microsoft IIS httpd
  - Port: 80
  - Version: 8.0
  - Location: /
- Service: Microsoft IIS httpd
  - Port: 443
  - Version: 8.0
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-4078
  - CVSS Score: 5.1
  - Description: The IP Security feature in Microsoft Internet Information Services (IIS) 8.0 and 8.5 does not properly process wildcard allow and deny rules for domains within the "IP Address and Domain Restrictions" list, which makes it easier for remote attackers to bypass an intended rule set via an HTTP request, aka "IIS Security Feature Bypass Vulnerability."
- Vulnerability: CVE-2014-4078
  - CVSS Score: 5.1
  - Description: The IP Security feature in Microsoft Internet Information Services (IIS) 8.0 and 8.5 does not properly process wildcard allow and deny rules for domains within the "IP Address and Domain Restrictions" list, which makes it easier for remote attackers to bypass an intended rule set via an HTTP request, aka "IIS Security Feature Bypass Vulnerability."

11.117 IP Address: 159.149.104.139

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.118 IP Address: 159.149.147.179

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.9p1 Ubuntu-3ubuntu0.6
  - Location:

No vulnerabilities found for this IP address.

11.119 IP Address: 159.149.104.164

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 80
  - Version: N/A
  - Location: https://159.149.104.164/
- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.

11.120 IP Address: 159.149.147.194

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 4
- Medium Vulnerabilities: 10
- Low Vulnerabilities: 0
- Total Vulnerabilities: 14

Services Running on IP Address

- Service: nginx
  - Port: 80
  - Version: 1.14.2
  - Location: https://islab.di.unimi.it/
- Service: nginx
  - Port: 443
  - Version: 1.14.2
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2023-44487
  - CVSS Score: N/A
  - Description: The HTTP/2 protocol allows a denial of service (server resource consumption) because request cancellation can reset many streams quickly, as exploited in the wild in August through October 2023.
- Vulnerability: CVE-2019-9516
  - CVSS Score: 6.8
  - Description: Some HTTP/2 implementations are vulnerable to a header leak, potentially leading to a denial of service. The attacker sends a stream of headers with a 0-length header name and 0-length header value, optionally Huffman encoded into 1-byte or greater headers. Some implementations allocate memory for these headers and keep the allocation alive until the session dies. This can consume excess memory.
- Vulnerability: CVE-2019-9513
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to resource loops, potentially leading to a denial of service. The attacker creates multiple request streams and continually shuffles the priority of the streams in a way that causes substantial churn to the priority tree. This can consume excess CPU.
- Vulnerability: CVE-2019-9511
  - CVSS Score: 7.8

  - Description: Some HTTP/2 implementations are vulnerable to window size manipulation and stream prioritization manipulation, potentially leading to a denial of service. The attacker requests a large amount of data from a specified resource over multiple streams. They manipulate window size and stream priority to force the server to queue the data in 1-byte chunks. Depending on how efficiently this data is queued, this can consume excess CPU, memory, or both.

- Vulnerability: CVE-2021-23017
  - CVSS Score: 6.8
  - Description: A security issue in nginx resolver was identified, which might allow an attacker who is able to forge UDP packets from the DNS server to cause 1-byte memory overwrite, resulting in worker process crash or potential other impact.

- Vulnerability: CVE-2021-3618
  - CVSS Score: 5.8
  - Description: ALPACA is an application layer protocol content confusion attack, exploiting TLS servers implementing different protocols but using compatible certificates, such as multi-domain or wildcard certificates. A MiTM attacker having access to victim's traffic at the TCP/IP layer can redirect traffic from one subdomain to another, resulting in a valid TLS session. This breaks the authentication of TLS and cross-protocol attacks may be possible where the behavior of one protocol service may compromise the other at the application layer.

- Vulnerability: CVE-2019-20372
  - CVSS Score: 4.3
  - Description: NGINX before 1.17.7, with certain error_page configurations, allows HTTP request smuggling, as demonstrated by the ability of an attacker to read unauthorized web pages in environments where NGINX is being fronted by a load balancer.

- Vulnerability: CVE-2018-16845
  - CVSS Score: 5.8
  - Description: nginx before versions 1.15.6, 1.14.1 has a vulnerability in the ngx_http_mp4_module, which might allow an attacker to cause infinite loop in a worker process, cause a worker process crash, or might result in worker process memory disclosure by using a specially crafted mp4 file. The issue only affects nginx if it is built with the ngx_http_mp4_module (the module is not built by default) and the .mp4. directive is used in the configuration file. Further, the attack is only possible if an attacker is able to trigger processing of a specially crafted mp4 file with the ngx_http_mp4_module.

- Vulnerability: CVE-2023-44487
  - CVSS Score: N/A
  - Description: The HTTP/2 protocol allows a denial of service (server resource consumption) because request cancellation can reset many streams quickly, as exploited in the wild in August through October 2023.

- Vulnerability: CVE-2019-9516
  - CVSS Score: 6.8

  - Description: Some HTTP/2 implementations are vulnerable to a header leak, potentially leading to a denial of service. The attacker sends a stream of headers with a 0-length header name and 0-length header value, optionally Huffman encoded into 1-byte or greater headers. Some implementations allocate memory for these headers and keep the allocation alive until the session dies. This can consume excess memory.

- Vulnerability: CVE-2019-9513
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to resource loops, potentially leading to a denial of service. The attacker creates multiple request streams and continually shuffles the priority of the streams in a way that causes substantial churn to the priority tree. This can consume excess CPU.

- Vulnerability: CVE-2019-9511
  - CVSS Score: 7.8
  - Description: Some HTTP/2 implementations are vulnerable to window size manipulation and stream prioritization manipulation, potentially leading to a denial of service. The attacker requests a large amount of data from a specified resource over multiple streams. They manipulate window size and stream priority to force the server to queue the data in 1-byte chunks. Depending on how efficiently this data is queued, this can consume excess CPU, memory, or both.

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  - CVSS Score: 6.8
  - Description: A security issue in nginx resolver was identified, which might allow an attacker who is able to forge UDP packets from the DNS server to cause 1-byte memory overwrite, resulting in worker process crash or potential other impact.

- Vulnerability: CVE-2021-3618
  - CVSS Score: 5.8
  - Description: ALPACA is an application layer protocol content confusion attack, exploiting TLS servers implementing different protocols but using compatible certificates, such as multi-domain or wildcard certificates. A MiTM attacker having access to victim's traffic at the TCP/IP layer can redirect traffic from one subdomain to another, resulting in a valid TLS session. This breaks the authentication of TLS and cross-protocol attacks may be possible where the behavior of one protocol service may compromise the other at the application layer.

- Vulnerability: CVE-2019-20372
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  - Description: NGINX before 1.17.7, with certain error_page configurations, allows HTTP request smuggling, as demonstrated by the ability of an attacker to read unauthorized web pages in environments where NGINX is being fronted by a load balancer.

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– Description: nginx before versions 1.15.6, 1.14.1 has a vulnerability in the ngx_http_mp4_module, which might allow an attacker to cause infinite loop in a worker process, cause a worker process crash, or might result in worker process memory disclosure by using a specially crafted mp4 file. The issue only affects nginx if it is built with the ngx_http_mp4_module (the module is not built by default) and the .mp4. directive is used in the configuration file. Further, the attack is only possible if an attacker is able to trigger processing of a specially crafted mp4 file with the ngx_http_mp4_module.

11.121 IP Address: 159.149.105.156

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 10
- High Vulnerabilities: 107
- Medium Vulnerabilities: 212
- Low Vulnerabilities: 13
- Total Vulnerabilities: 342

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.2.22
  - Location: /
- Service: Apache httpd
  - Port: 443
  - Version: 2.2.22
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2015-3183
  - CVSS Score: 5

  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2012-0883
  - CVSS Score: 6.9
  - Description: envvars (aka envvars-std) in the Apache HTTP Server before 2.4.2 places a zero-length directory name in the LD_LIBRARY_PATH, which allows local users to gain privileges via a Trojan horse DSO in the current working directory during execution of apachectl.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2017-3169
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_ssl may dereference a NULL pointer when third-party modules call ap_hook_process_connection() during an HTTP request to an HTTPS port.

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2012-3499
  - CVSS Score: 4.3
  - Description: Multiple cross-site scripting (XSS) vulnerabilities in the Apache HTTP Server 2.2.x before 2.2.24-dev and 2.4.x before 2.4.4 allow remote attackers to inject arbitrary web script or HTML via vectors involving hostnames and URIs in the (1) mod_imagemap, (2) mod_info, (3) mod_ldap, (4) mod_proxy_ftp, and (5) mod_status modules.

- Vulnerability: CVE-2012-4558
  - CVSS Score: 4.3
  - Description: Multiple cross-site scripting (XSS) vulnerabilities in the balancer_handler function in the manager interface in mod_proxy_balancer.c in the mod_proxy_balancer module in the Apache HTTP Server 2.2.x before 2.2.24-dev and 2.4.x before 2.4.4 allow remote attackers to inject arbitrary web script or HTML via a crafted string.

- Vulnerability: CVE-2021-32791

  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2013-1896
  - CVSS Score: 4.3
  - Description: mod_dav.c in the Apache HTTP Server before 2.2.25 does not properly determine whether DAV is enabled for a URI, which allows remote attackers to cause a denial of service (segmentation fault) via a MERGE request in which the URI is configured for handling by the mod_dav_svn module, but a certain href attribute in XML data refers to a non-DAV URI.

- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.

- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8
  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A

  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."
- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2022-31813

  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2012-2687
  - CVSS Score: 2.6
  - Description: Multiple cross-site scripting (XSS) vulnerabilities in the make_variant_list function in mod_negotiation.c in the mod_negotiation module in the Apache HTTP Server 2.4.x before 2.4.3, when the MultiViews option is enabled, allow remote attackers to inject arbitrary web script or HTML via a crafted filename that is not properly handled during construction of a variant list.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2016-5387
  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3

  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2008-0455
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_negotiation module in the Apache HTTP Server 2.2.6 and earlier in the 2.2.x series, 2.0.61 and earlier in the 2.0.x series, and 1.3.39 and earlier in the 1.3.x series allows remote authenticated users to inject arbitrary web script or HTML by uploading a file with a name containing XSS sequences and a file extension, which leads to injection within a (1) "406 Not Acceptable" or (2) "300 Multiple Choices" HTTP response when the extension is omitted in a request for the file.

- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3

  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.

- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3
  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.

- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2017-9798
  - CVSS Score: 5
  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2013-1862
  - CVSS Score: 5.1
  - Description: mod_rewrite.c in the mod_rewrite module in the Apache HTTP Server 2.2.x before 2.2.25 writes data to a log file without sanitizing non-printable characters, which might allow remote attackers to execute arbitrary commands via an HTTP request containing an escape sequence for a terminal emulator.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.
- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.
- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2013-2110
  - CVSS Score: 5
  - Description: Heap-based buffer overflow in the php_quot_print_encode function in ext/standard/quot_print.c in PHP before 5.3.26 and 5.4.x before 5.4.16 allows remote attackers to cause a denial of service (application crash) or possibly have unspecified other impact via a crafted argument to the quoted_printable_encode function.
- Vulnerability: CVE-2018-10549
  - CVSS Score: 6.8
  - Description: An issue was discovered in PHP before 5.6.36, 7.0.x before 7.0.30, 7.1.x before 7.1.17, and 7.2.x before 7.2.5. exif_read_data in ext/exif/exif.c has an out-of-bounds read for crafted JPEG data because exif_iif_add_value mishandles the case of a MakerNote that lacks a final '\{}0' character.
- Vulnerability: CVE-2018-10548
  - CVSS Score: 5

  - Description: An issue was discovered in PHP before 5.6.36, 7.0.x before 7.0.30, 7.1.x before 7.1.17, and 7.2.x before 7.2.5. ext/ldap/ldap.c allows remote LDAP servers to cause a denial of service (NULL pointer dereference and application crash) because of mishandling of the ldap_get_dn return value.

- Vulnerability: CVE-2016-3141
  - CVSS Score: 7.5
  - Description: Use-after-free vulnerability in wddx.c in the WDDX extension in PHP before 5.5.33 and 5.6.x before 5.6.19 allows remote attackers to cause a denial of service (memory corruption and application crash) or possibly have unspecified other impact by triggering a wddx_deserialize call on XML data containing a crafted var element.
- Vulnerability: CVE-2018-10545
  - CVSS Score: 1.9
  - Description: An issue was discovered in PHP before 5.6.35, 7.0.x before 7.0.29, 7.1.x before 7.1.16, and 7.2.x before 7.2.4. Dumpable FPM child processes allow bypassing opcache access controls because fpm_unix.c makes a PR_SET_DUMPABLE prctl call, allowing one user (in a multiuser environment) to obtain sensitive information from the process memory of a second user's PHP applications by running gcore on the PID of the PHP-FPM worker process.
- Vulnerability: CVE-2018-10547
  - CVSS Score: 4.3
  - Description: An issue was discovered in ext/phar/phar_object.c in PHP before 5.6.36, 7.0.x before 7.0.30, 7.1.x before 7.1.17, and 7.2.x before 7.2.5. There is Reflected XSS on the PHAR 403 and 404 error pages via request data of a request for a .phar file. NOTE: this vulnerability exists because of an incomplete fix for CVE-2018-5712.
- Vulnerability: CVE-2018-10546
  - CVSS Score: 5
  - Description: An issue was discovered in PHP before 5.6.36, 7.0.x before 7.0.30, 7.1.x before 7.1.17, and 7.2.x before 7.2.5. An infinite loop exists in ext/iconv/iconv.c because the iconv stream filter does not reject invalid multibyte sequences.
- Vulnerability: CVE-2017-7272
  - CVSS Score: 5.8
  - Description: PHP through 7.1.11 enables potential SSRF in applications that accept an fsockopen or pfsockopen hostname argument with an expectation that the port number is constrained. Because a :port syntax is recognized, fsockopen will use the port number that is specified in the hostname argument, instead of the port number in the second argument of the function.
- Vulnerability: CVE-2017-9798
  - CVSS Score: 5

  - Description: Apache httpd allows remote attackers to read secret data from process memory if the Limit directive can be set in a user's .htaccess file, or if httpd.conf has certain misconfigurations, aka Optionsbleed. This affects the Apache HTTP Server through 2.2.34 and 2.4.x through 2.4.27. The attacker sends an unauthenticated OPTIONS HTTP request when attempting to read secret data. This is a use-after-free issue and thus secret data is not always sent, and the specific data depends on many factors including configuration. Exploitation with .htaccess can be blocked with a patch to the ap_limit_section function in server/core.c.

- Vulnerability: CVE-2015-0231
  - CVSS Score: 7.5
  - Description: Use-after-free vulnerability in the process_nested_data function in ext/standard/var_unserializer.re in PHP before 5.4.37, 5.5.x before 5.5.21, and 5.6.x before 5.6.5 allows remote attackers to execute arbitrary code via a crafted unserialize call that leverages improper handling of duplicate numerical keys within the serialized properties of an object. NOTE: this vulnerability exists because of an incomplete fix for CVE-2014-8142.

- Vulnerability: CVE-2015-0232
  - CVSS Score: 6.8
  - Description: The exif_process_unicode function in ext/exif/exif.c in PHP before 5.4.37, 5.5.x before 5.5.21, and 5.6.x before 5.6.5 allows remote attackers to execute arbitrary code or cause a denial of service (uninitialized pointer free and application crash) via crafted EXIF data in a JPEG image.

- Vulnerability: CVE-2024-4577
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2016-3142
  - CVSS Score: 6.4
  - Description: The phar_parse_zipfile function in zip.c in the PHAR extension in PHP before 5.5.33 and 5.6.x before 5.6.19 allows remote attackers to obtain sensitive information from process memory or cause a denial of service (out-of-bounds read and application crash) by placing a PK\{}x05\{}x06 signature at an invalid location.

- Vulnerability: CVE-2012-1172
  - CVSS Score: 5.8
  - Description: The file-upload implementation in rfc1867.c in PHP before 5.4.0 does not properly handle invalid [(open square bracket) characters in name values, which makes it easier for remote attackers to cause a denial of service (malformed $_FILES indexes) or conduct directory traversal attacks during multi-file uploads by leveraging a script that lacks its own filename restrictions.
- Vulnerability: CVE-2017-3169
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_ssl may dereference a NULL pointer when third-party modules call ap_hook_process_connection() during an HTTP request to an HTTPS port.
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2014-5459
  - CVSS Score: 3.6
  - Description: The PEAR_REST class in REST.php in PEAR in PHP through 5.6.0 allows local users to write to arbitrary files via a symlink attack on a (1) rest.cachefile or (2) rest.cacheid file in /tmp/pear/cache/, related to the retrieveCacheFirst and useLocalCache functions.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2015-8835
  - CVSS Score: 7.5
  - Description: The make_http_soap_request function in ext/soap/php_http.c in PHP before 5.4.44, 5.5.x before 5.5.28, and 5.6.x before 5.6.12 does not properly retrieve keys, which allows remote attackers to cause a denial of service (NULL pointer dereference, type confusion, and application crash) or possibly execute arbitrary code via crafted serialized data representing a numerically indexed _cookies array, related to the SoapClient::__call method in ext/soap/soap.c.

- Vulnerability: CVE-2016-7418
  - CVSS Score: 5
  - Description: The php_wddx_push_element function in ext/wddx/wddx.c in PHP before 5.6.26 and 7.x before 7.0.11 allows remote attackers to cause a denial of service (invalid pointer access and out-of-bounds read) or possibly have unspecified other impact via an incorrect boolean element in a wddxPacket XML document, leading to mishandling in a wddx_deserialize call.
- Vulnerability: CVE-2012-2311
  - CVSS Score: 7.5
  - Description: sapi/cgi/cgi_main.c in PHP before 5.3.13 and 5.4.x before 5.4.3, when configured as a CGI script (aka php-cgi), does not properly handle query strings that contain a %3D sequence but no = (equals sign) character, which allows remote attackers to execute arbitrary code by placing command-line options in the query string, related to lack of skipping a certain php_getopt for the 'd' case. NOTE: this vulnerability exists because of an incomplete fix for CVE-2012-1823.
- Vulnerability: CVE-2016-7414
  - CVSS Score: 7.5
  - Description: The ZIP signature-verification feature in PHP before 5.6.26 and 7.x before 7.0.11 does not ensure that the uncompressed_filesize field is large enough, which allows remote attackers to cause a denial of service (out-of-bounds memory access) or possibly have unspecified other impact via a crafted PHAR archive, related to ext/phar/util.c and ext/phar/zip.c.
- Vulnerability: CVE-2016-7416
  - CVSS Score: 5
  - Description: ext/intl/msgformat/msgformat_format.c in PHP before 5.6.26 and 7.x before 7.0.11 does not properly restrict the locale length provided to the Locale class in the ICU library, which allows remote attackers to cause a denial of service (application crash) or possibly have unspecified other impact via a MessageFormatter::formatMessage call with a long first argument.
- Vulnerability: CVE-2016-7417
  - CVSS Score: 7.5
  - Description: ext/spl/spl_array.c in PHP before 5.6.26 and 7.x before 7.0.11 proceeds with SplArray unserialization without validating a return value and data type, which allows remote attackers to cause a denial of service or possibly have unspecified other impact via crafted serialized data.
- Vulnerability: CVE-2014-0185
  - CVSS Score: 7.2
  - Description: sapi/fpm/fpm/fpm_unix.c in the FastCGI Process Manager (FPM) in PHP before 5.4.28 and 5.5.x before 5.5.12 uses 0666 permissions for the UNIX socket, which allows local users to gain privileges via a crafted FastCGI client.
- Vulnerability: CVE-2016-7411
  - CVSS Score: 7.5

  - Description: ext/standard/var_unserializer.re in PHP before 5.6.26 mishandles object-deserialization failures, which allows remote attackers to cause a denial of service (memory corruption) or possibly have unspecified other impact via an unserialize call that references a partially constructed object.

- Vulnerability: CVE-2016-7412
  - CVSS Score: 6.8
  - Description: ext/mysqlnd/mysqlnd_wireprotocol.c in PHP before 5.6.26 and 7.x before 7.0.11 does not verify that a BIT field has the UNSIGNED_FLAG flag, which allows remote MySQL servers to cause a denial of service (heap-based buffer overflow) or possibly have unspecified other impact via crafted field metadata.
- Vulnerability: CVE-2016-7413
  - CVSS Score: 7.5
  - Description: Use-after-free vulnerability in the wddx_stack_destroy function in ext/wddx/wddx.c in PHP before 5.6.26 and 7.x before 7.0.11 allows remote attackers to cause a denial of service or possibly have unspecified other impact via a wddxPacket XML document that lacks an end-tag for a recordset field element, leading to mishandling in a wddx_deserialize call.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2016-8670
  - CVSS Score: 7.5
  - Description: Integer signedness error in the dynamicGetbuf function in gd_io_dp.c in the GD Graphics Library (aka libgd) through 2.2.3, as used in PHP before 5.6.28 and 7.x before 7.0.13, allows remote attackers to cause a denial of service (stack-based buffer overflow) or possibly have unspecified other impact via a crafted imagecreatefromstring call.
- Vulnerability: CVE-2012-2688
  - CVSS Score: 10
  - Description: Unspecified vulnerability in the _php_stream_scandir function in the stream implementation in PHP before 5.3.15 and 5.4.x before 5.4.5 has unknown impact and remote attack vectors, related to an "overflow."
- Vulnerability: CVE-2012-2687
  - CVSS Score: 2.6
  - Description: Multiple cross-site scripting (XSS) vulnerabilities in the make_variant_list function in mod_negotiation.c in the mod_negotiation module in the Apache HTTP Server 2.4.x before 2.4.3, when the MultiViews option is enabled, allow remote attackers to inject arbitrary web script or HTML via a crafted filename that is not properly handled during construction of a variant list.
- Vulnerability: CVE-2015-8994
  - CVSS Score: 6.8

  - Description: An issue was discovered in PHP 5.x and 7.x, when the configuration uses apache2handler/mod_php or php-fpm with OpCache enabled. With 5.x after 5.6.28 or 7.x after 7.0.13, the issue is resolved in a non-default configuration with the opcache.validate_permission=1 setting. The vulnerability details are as follows. In PHP SAPIs where PHP interpreters share a common parent process, Zend OpCache creates a shared memory object owned by the common parent during initialization. Child PHP processes inherit the SHM descriptor, using it to cache and retrieve compiled script bytecode ("opcode" in PHP jargon). Cache keys vary depending on configuration, but filename is a central key component, and compiled opcode can generally be run if a script's filename is known or can be guessed. Many common shared-hosting configurations change EUID in child processes to enforce privilege separation among hosted users (for example using mod_ruid2 for the Apache HTTP Server, or php-fpm user settings). In these scenarios, the default Zend OpCache behavior defeats script file permissions by sharing a single SHM cache among all child PHP processes. PHP scripts often contain sensitive information: Think of CMS configurations where reading or running another user's script usually means gaining privileges to the CMS database.

- Vulnerability: CVE-2016-3171
  - CVSS Score: 6.8
  - Description: Drupal 6.x before 6.38, when used with PHP before 5.4.45, 5.5.x before 5.5.29, or 5.6.x before 5.6.13, might allow remote attackers to execute arbitrary code via vectors related to session data truncation.
- Vulnerability: CVE-2014-3587
  - CVSS Score: 4.3
  - Description: Integer overflow in the cdf_read_property_info function in cdf.c in file through 5.19, as used in the Fileinfo component in PHP before 5.4.32 and 5.5.x before 5.5.16, allows remote attackers to cause a denial of service (application crash) via a crafted CDF file. NOTE: this vulnerability exists because of an incomplete fix for CVE-2012-1571.
- Vulnerability: CVE-2016-5773
  - CVSS Score: 7.5
  - Description: php_zip.c in the zip extension in PHP before 5.5.37, 5.6.x before 5.6.23, and 7.x before 7.0.8 improperly interacts with the unserialize implementation and garbage collection, which allows remote attackers to execute arbitrary code or cause a denial of service (use-after-free and application crash) via crafted serialized data containing a ZipArchive object.
- Vulnerability: CVE-2016-5772
  - CVSS Score: 7.5
  - Description: Double free vulnerability in the php_wddx_process_data function in wddx.c in the WDDX extension in PHP before 5.5.37, 5.6.x before 5.6.23, and 7.x before 7.0.8 allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via crafted XML data that is mishandled in a wddx_deserialize call.
- Vulnerability: CVE-2016-5771
  - CVSS Score: 7.5

  - Description: spl_array.c in the SPL extension in PHP before 5.5.37 and 5.6.x before 5.6.23 improperly interacts with the unserialize implementation and garbage collection, which allows remote attackers to execute arbitrary code or cause a denial of service (use-after-free and application crash) via crafted serialized data.

- Vulnerability: CVE-2016-5770
  - CVSS Score: 7.5
  - Description: Integer overflow in the SplFileObject::fread function in spl_directory.c in the SPL extension in PHP before 5.5.37 and 5.6.x before 5.6.23 allows remote attackers to cause a denial of service or possibly have unspecified other impact via a large integer argument, a related issue to CVE-2016-5096.
- Vulnerability: CVE-2012-6113
  - CVSS Score: 5
  - Description: The openssl_encrypt function in ext/openssl/openssl.c in PHP 5.3.9 through 5.3.13 does not initialize a certain variable, which allows remote attackers to obtain sensitive information from process memory by providing zero bytes of input data.
- Vulnerability: CVE-2015-8935
  - CVSS Score: 4.3
  - Description: The sapi_header_op function in main/SAPI.c in PHP before 5.4.38, 5.5.x before 5.5.22, and 5.6.x before 5.6.6 supports deprecated line folding without considering browser compatibility, which allows remote attackers to conduct cross-site scripting (XSS) attacks against Internet Explorer by leveraging (1) %0A%20 or (2) %0D%0A%20 mishandling in the header function.
- Vulnerability: CVE-2018-20783
  - CVSS Score: 5
  - Description: In PHP before 5.6.39, 7.x before 7.0.33, 7.1.x before 7.1.25, and 7.2.x before 7.2.13, a buffer over-read in PHAR reading functions may allow an attacker to read allocated or unallocated memory past the actual data when trying to parse a .phar file. This is related to phar_parse_pharfile in ext/phar/phar.c.
- Vulnerability: CVE-2015-4147
  - CVSS Score: 7.5
  - Description: The SoapClient::__call method in ext/soap/soap.c in PHP before 5.4.39, 5.5.x before 5.5.23, and 5.6.x before 5.6.7 does not verify that __default_headers is an array, which allows remote attackers to execute arbitrary code by providing crafted serialized data with an unexpected data type, related to a "type confusion" issue.
- Vulnerability: CVE-2016-5766
  - CVSS Score: 6.8
  - Description: Integer overflow in the _gd2GetHeader function in gd_gd2.c in the GD Graphics Library (aka libgd) before 2.2.3, as used in PHP before 5.5.37, 5.6.x before 5.6.23, and 7.x before 7.0.8, allows remote attackers to cause a denial of service (heap-based buffer overflow and application crash) or possibly have unspecified other impact via crafted chunk dimensions in an image.
- Vulnerability: CVE-2011-2688

  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2012-0883
  - CVSS Score: 6.9
  - Description: envvars (aka envvars-std) in the Apache HTTP Server before 2.4.2 places a zero-length directory name in the LD_LIBRARY_PATH, which allows local users to gain privileges via a Trojan horse DSO in the current working directory during execution of apachectl.

- Vulnerability: CVE-2015-2348
  - CVSS Score: 5
  - Description: The move_uploaded_file implementation in ext/standard/basic_functions.c in PHP before 5.4.39, 5.5.x before 5.5.23, and 5.6.x before 5.6.7 truncates a pathname upon encountering a \{}x00 character, which allows remote attackers to bypass intended extension restrictions and create files with unexpected names via a crafted second argument. NOTE: this vulnerability exists because of an incomplete fix for CVE-2006-7243.

- Vulnerability: CVE-2017-3167
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, use of the ap_get_basic_auth_pw() by third-party modules outside of the authentication phase may lead to authentication requirements being bypassed.

- Vulnerability: CVE-2015-8838
  - CVSS Score: 4.3
  - Description: ext/mysqlnd/mysqlnd.c in PHP before 5.4.43, 5.5.x before 5.5.27, and 5.6.x before 5.6.11 uses a client SSL option to mean that SSL is optional, which allows man-in-the-middle attackers to spoof servers via a cleartext-downgrade attack, a related issue to CVE-2015-3152.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2016-4070
  - CVSS Score: 5
  - Description: Integer overflow in the php_raw_url_encode function in ext/standard/url.c in PHP before 5.5.34, 5.6.x before 5.6.20, and 7.x before 7.0.5 allows remote attackers to cause a denial of service (application crash) via a long string to the rawurlencode function. NOTE: the vendor says "Not sure if this qualifies as security issue (probably not).
- Vulnerability: CVE-2013-7327
  - CVSS Score: 6.8
  - Description: The gdImageCrop function in ext/gd/gd.c in PHP 5.5.x before 5.5.9 does not check return values, which allows remote attackers to cause a denial of service (application crash) or possibly have unspecified other impact via invalid imagecrop arguments that lead to use of a NULL pointer as a return value, a different vulnerability than CVE-2013-7226.
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2013-6712
  - CVSS Score: 5
  - Description: The scan function in ext/date/lib/parse_iso_intervals.c in PHP through 5.5.6 does not properly restrict creation of DateInterval objects, which might allow remote attackers to cause a denial of service (heap-based buffer over-read) via a crafted interval specification.
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.

- Vulnerability: CVE-2018-14851
  - CVSS Score: 4.3
  - Description: exif_process_IFD_in_MAKERNOTE in ext/exif/exif.c in PHP before 5.6.37, 7.0.x before 7.0.31, 7.1.x before 7.1.20, and 7.2.x before 7.2.8 allows remote attackers to cause a denial of service (out-of-bounds read and application crash) via a crafted JPEG file.
- Vulnerability: CVE-2012-1823
  - CVSS Score: 7.5
  - Description: sapi/cgi/cgi_main.c in PHP before 5.3.12 and 5.4.x before 5.4.2, when configured as a CGI script (aka php-cgi), does not properly handle query strings that lack an = (equals sign) character, which allows remote attackers to execute arbitrary code by placing command-line options in the query string, related to lack of skipping a certain php_getopt for the 'd' case.
- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.
- Vulnerability: CVE-2013-1635
  - CVSS Score: 7.5
  - Description: ext/soap/soap.c in PHP before 5.3.22 and 5.4.x before 5.4.13 does not validate the relationship between the soap.wsdl_cache_dir directive and the open_basedir directive, which allows remote attackers to bypass intended access restrictions by triggering the creation of cached SOAP WSDL files in an arbitrary directory.
- Vulnerability: CVE-2014-0231
  - CVSS Score: 5
  - Description: The mod_cgid module in the Apache HTTP Server before 2.4.10 does not have a timeout mechanism, which allows remote attackers to cause a denial of service (process hang) via a request to a CGI script that does not read from its stdin file descriptor.
- Vulnerability: CVE-2016-4975
  - CVSS Score: 4.3
  - Description: Possible CRLF injection allowing HTTP response splitting attacks for sites which use mod_userdir. This issue was mitigated by changes made in 2.4.25 and 2.2.32 which prohibit CR or LF injection into the "Location" or other outbound header key or value. Fixed in Apache HTTP Server 2.4.25 (Affected 2.4.1-2.4.23). Fixed in Apache HTTP Server 2.2.32 (Affected 2.2.0-2.2.31).
- Vulnerability: CVE-2013-1824
  - CVSS Score: 4.3
  - Description: The SOAP parser in PHP before 5.3.22 and 5.4.x before 5.4.12 allows remote attackers to read arbitrary files via a SOAP WSDL file containing an XML external entity declaration in conjunction with an entity reference, related to an XML External Entity (XXE) issue in the soap_xmlParseFile and soap_xmlParseMemory functions.
- Vulnerability: CVE-2017-8923

  - CVSS Score: 7.5
  - Description: The zend_string_extend function in Zend/zend_string.h in PHP through 7.1.5 does not prevent changes to string objects that result in a negative length, which allows remote attackers to cause a denial of service (application crash) or possibly have unspecified other impact by leveraging a script's use of .= with a long string.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2013-6501
  - CVSS Score: 4.6
  - Description: The default soap.wsdl_cache_dir setting in (1) php.ini-production and (2) php.ini-development in PHP through 5.6.7 specifies the /tmp directory, which makes it easier for local users to conduct WSDL injection attacks by creating a file under /tmp with a predictable filename that is used by the get_sdl function in ext/soap/php_sdl.c.

- Vulnerability: CVE-2015-3183
  - CVSS Score: 5
  - Description: The chunked transfer coding implementation in the Apache HTTP Server before 2.4.14 does not properly parse chunk headers, which allows remote attackers to conduct HTTP request smuggling attacks via a crafted request, related to mishandling of large chunk-size values and invalid chunk-extension characters in modules/http/http_filters.c.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2013-6420
  - CVSS Score: 7.5
  - Description: The asn1_time_to_time_t function in ext/openssl/openssl.c in PHP before 5.3.28, 5.4.x before 5.4.23, and 5.5.x before 5.5.7 does not properly parse (1) notBefore and (2) notAfter timestamps in X.509 certificates, which allows remote attackers to execute arbitrary code or cause a denial of service (memory corruption) via a crafted certificate that is not properly handled by the openssl_x509_parse function.

- Vulnerability: CVE-2014-3487
  - CVSS Score: 4.3
  - Description: The cdf_read_property_info function in file before 5.19, as used in the Fileinfo component in PHP before 5.4.30 and 5.5.x before 5.5.14, does not properly validate a stream offset, which allows remote attackers to cause a denial of service (application crash) via a crafted CDF file.

- Vulnerability: CVE-2013-1643

  - CVSS Score: 5
  - Description: The SOAP parser in PHP before 5.3.23 and 5.4.x before 5.4.13 allows remote attackers to read arbitrary files via a SOAP WSDL file containing an XML external entity declaration in conjunction with an entity reference, related to an XML External Entity (XXE) issue in the soap_xmlParseFile and soap_xmlParseMemory functions. NOTE: this vulnerability exists because of an incorrect fix for CVE-2013-1824.

- Vulnerability: CVE-2016-6174
  - CVSS Score: 6.8
  - Description: applications/core/modules/front/system/content.php in Invision Power Services IPS Community Suite (aka Invision Power Board, IPB, or Power Board) before 4.1.13, when used with PHP before 5.4.24 or 5.5.x before 5.5.8, allows remote attackers to execute arbitrary code via the content_class parameter.

- Vulnerability: CVE-2018-5712
  - CVSS Score: 4.3
  - Description: An issue was discovered in PHP before 5.6.33, 7.0.x before 7.0.27, 7.1.x before 7.1.13, and 7.2.x before 7.2.1. There is Reflected XSS on the PHAR 404 error page via the URI of a request for a .phar file.

- Vulnerability: CVE-2022-31628
  - CVSS Score: N/A
  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the phar uncompressor code would recursively uncompress "quines" gzip files, resulting in an infinite loop.

- Vulnerability: CVE-2022-31629
  - CVSS Score: N/A
  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the vulnerability enables network and same-site attackers to set a standard insecure cookie in the victim's browser which is treated as a '__Host-' or '__Secure-' cookie by PHP applications.

- Vulnerability: CVE-2016-5768
  - CVSS Score: 7.5
  - Description: Double free vulnerability in the _php_mb_regex_ereg_replace_exec function in php_mbregex.c in the mbstring extension in PHP before 5.5.37, 5.6.x before 5.6.23, and 7.x before 7.0.8 allows remote attackers to execute arbitrary code or cause a denial of service (application crash) by leveraging a callback exception.

- Vulnerability: CVE-2016-5769
  - CVSS Score: 7.5
  - Description: Multiple integer overflows in mcrypt.c in the mcrypt extension in PHP before 5.5.37, 5.6.x before 5.6.23, and 7.x before 7.0.8 allow remote attackers to cause a denial of service (heap-based buffer overflow and application crash) or possibly have unspecified other impact via a crafted length value, related to the (1) mcrypt_generic and (2) mdecrypt_generic functions.

- Vulnerability: CVE-2016-9137
  - CVSS Score: 7.5

  - Description: Use-after-free vulnerability in the CURLFile implementation in ext/curl/curl_file.c in PHP before 5.6.27 and 7.x before 7.0.12 allows remote attackers to cause a denial of service or possibly have unspecified other impact via crafted serialized data that is mishandled during __wakeup processing.

- Vulnerability: CVE-2015-2787
  - CVSS Score: 7.5
  - Description: Use-after-free vulnerability in the process_nested_data function in ext/standard/var_unserializer.re in PHP before 5.4.39, 5.5.x before 5.5.23, and 5.6.x before 5.6.7 allows remote attackers to execute arbitrary code via a crafted unserialize call that leverages use of the unset function within an __wakeup function, a related issue to CVE-2015-0231.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2012-2143
  - CVSS Score: 4.3
  - Description: The crypt_des (aka DES-based crypt) function in FreeBSD before 9.0-RELEASE-p2, as used in PHP, PostgreSQL, and other products, does not process the complete cleartext password if this password contains a 0x80 character, which makes it easier for context-dependent attackers to obtain access via an authentication attempt with an initial substring of the intended password, as demonstrated by a Unicode password.
- Vulnerability: CVE-2015-6831
  - CVSS Score: 7.5
  - Description: Multiple use-after-free vulnerabilities in SPL in PHP before 5.4.44, 5.5.x before 5.5.28, and 5.6.x before 5.6.12 allow remote attackers to execute arbitrary code via vectors involving (1) ArrayObject, (2) SplObjectStorage, and (3) SplDoublyLinkedList, which are mishandled during unserialization.
- Vulnerability: CVE-2015-6832
  - CVSS Score: 7.5
  - Description: Use-after-free vulnerability in the SPL unserialize implementation in ext/spl/spl_array.c in PHP before 5.4.44, 5.5.x before 5.5.28, and 5.6.x before 5.6.12 allows remote attackers to execute arbitrary code via crafted serialized data that triggers misuse of an array field.
- Vulnerability: CVE-2015-6833
  - CVSS Score: 5
  - Description: Directory traversal vulnerability in the PharData class in PHP before 5.4.44, 5.5.x before 5.5.28, and 5.6.x before 5.6.12 allows remote attackers to write to arbitrary files via a .. (dot dot) in a ZIP archive entry that is mishandled during an extractTo call.
- Vulnerability: CVE-2015-6834
  - CVSS Score: 7.5

  - Description: Multiple use-after-free vulnerabilities in PHP before 5.4.45, 5.5.x before 5.5.29, and 5.6.x before 5.6.13 allow remote attackers to execute arbitrary code via vectors related to (1) the Serializable interface, (2) the SplObjectStorage class, and (3) the SplDoublyLinkedList class, which are mishandled during unserialization.

- Vulnerability: CVE-2015-6835
  - CVSS Score: 7.5
  - Description: The session deserializer in PHP before 5.4.45, 5.5.x before 5.5.29, and 5.6.x before 5.6.13 mishandles multiple php_var_unserialize calls, which allow remote attackers to execute arbitrary code or cause a denial of service (use-after-free) via crafted session content.
- Vulnerability: CVE-2015-6836
  - CVSS Score: 7.5
  - Description: The SoapClient __call method in ext/soap/soap.c in PHP before 5.4.45, 5.5.x before 5.5.29, and 5.6.x before 5.6.13 does not properly manage headers, which allows remote attackers to execute arbitrary code via crafted serialized data that triggers a "type confusion" in the serialize_function_call function.
- Vulnerability: CVE-2015-6837
  - CVSS Score: 5
  - Description: The xsl_ext_function_php function in ext/xsl/xsltprocessor.c in PHP before 5.4.45, 5.5.x before 5.5.29, and 5.6.x before 5.6.13, when libxml2 before 2.9.2 is used, does not consider the possibility of a NULL valuePop return value before proceeding with a free operation during initial error checking, which allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a crafted XML document, a different vulnerability than CVE-2015-6838.
- Vulnerability: CVE-2015-6838
  - CVSS Score: 5
  - Description: The xsl_ext_function_php function in ext/xsl/xsltprocessor.c in PHP before 5.4.45, 5.5.x before 5.5.29, and 5.6.x before 5.6.13, when libxml2 before 2.9.2 is used, does not consider the possibility of a NULL valuePop return value before proceeding with a free operation after the principal argument loop, which allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a crafted XML document, a different vulnerability than CVE-2015-6837.
- Vulnerability: CVE-2013-4113
  - CVSS Score: 6.8
  - Description: ext/xml/xml.c in PHP before 5.3.27 does not properly consider parsing depth, which allows remote attackers to cause a denial of service (heap memory corruption) or possibly have unspecified other impact via a crafted document that is processed by the xml_parse_into_struct function.
- Vulnerability: CVE-2014-0098
  - CVSS Score: 5
  - Description: The log_cookie function in mod_log_config.c in the mod_log_config module in the Apache HTTP Server before 2.4.8 allows remote attackers to cause a denial of service (segmentation fault and daemon crash) via a crafted cookie that is not properly handled during truncation.

- Vulnerability: CVE-2018-19520
  - CVSS Score: 6.5
  - Description: An issue was discovered in SDCMS 1.6 with PHP 5.x. app/admin/controller/themecontroller.php uses a check_bad function in an attempt to block certain PHP functions such as eval, but does not prevent use of preg_replace 'e' calls, allowing users to execute arbitrary code by leveraging access to admin template management.
- Vulnerability: CVE-2018-19396
  - CVSS Score: 5
  - Description: ext/standard/var_unserializer.c in PHP 5.x through 7.1.24 allows attackers to cause a denial of service (application crash) via an unserialize call for the com, dotnet, or variant class.
- Vulnerability: CVE-2016-7478
  - CVSS Score: 5
  - Description: Zend/zend_exceptions.c in PHP, possibly 5.x before 5.6.28 and 7.x before 7.0.13, allows remote attackers to cause a denial of service (infinite loop) via a crafted Exception object in serialized data, a related issue to CVE-2015-8876.
- Vulnerability: CVE-2017-7890
  - CVSS Score: 4.3
  - Description: The GIF decoding function gdImageCreateFromGifCtx in gd_gif_in.c in the GD Graphics Library (aka libgd), as used in PHP before 5.6.31 and 7.x before 7.1.7, does not zero colorMap arrays before use. A specially crafted GIF image could use the uninitialized tables to read ~700 bytes from the top of the stack, potentially disclosing sensitive information.
- Vulnerability: CVE-2017-11145
  - CVSS Score: 5
  - Description: In PHP before 5.6.31, 7.x before 7.0.21, and 7.1.x before 7.1.7, an error in the date extension's timelib_meridian parsing code could be used by attackers able to supply date strings to leak information from the interpreter, related to ext/date/lib/parse_date.c out-of-bounds reads affecting the php_parse_date function. NOTE: the correct fix is in the e8b7698f5ee757ce2c8bd10a192a491a498f891c commit, not the bd77ac90d3bdf31ce2a5251ad92e9e75 gist.
- Vulnerability: CVE-2017-11144
  - CVSS Score: 5
  - Description: In PHP before 5.6.31, 7.x before 7.0.21, and 7.1.x before 7.1.7, the openssl extension PEM sealing code did not check the return value of the OpenSSL sealing function, which could lead to a crash of the PHP interpreter, related to an interpretation conflict for a negative number in ext/openssl/openssl.c, and an OpenSSL documentation omission.
- Vulnerability: CVE-2017-11147
  - CVSS Score: 6.4
  - Description: In PHP before 5.6.30 and 7.x before 7.0.15, the PHAR archive handler could be used by attackers supplying malicious archive files to crash the PHP interpreter or potentially disclose information due to a buffer over-read in the phar_parse_pharfile function in ext/phar/phar.c.

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2015-3411
  - CVSS Score: 6.4
  - Description: PHP before 5.4.40, 5.5.x before 5.5.24, and 5.6.x before 5.6.8 does not ensure that pathnames lack %00 sequences, which might allow remote attackers to read or write to arbitrary files via crafted input to an application that calls (1) a DOMDocument load method, (2) the xmlwriter_open_uri function, (3) the finfo_file function, or (4) the hash_hmac_file function, as demonstrated by a filename\{}0.xml attack that bypasses an intended configuration in which client users may read only .xml files.
- Vulnerability: CVE-2012-1171
  - CVSS Score: 5
  - Description: The libxml RSHUTDOWN function in PHP 5.x allows remote attackers to bypass the open_basedir protection mechanism and read arbitrary files via vectors involving a stream_close method call during use of a custom stream wrapper.
- Vulnerability: CVE-2014-0207
  - CVSS Score: 4.3
  - Description: The cdf_read_short_sector function in cdf.c in file before 5.19, as used in the Fileinfo component in PHP before 5.4.30 and 5.5.x before 5.5.14, allows remote attackers to cause a denial of service (assertion failure and application exit) via a crafted CDF file.
- Vulnerability: CVE-2012-0831
  - CVSS Score: 6.8
  - Description: PHP before 5.3.10 does not properly perform a temporary change to the magic_quotes_gpc directive during the importing of environment variables, which makes it easier for remote attackers to conduct SQL injection attacks via a crafted request, related to main/php_variables.c, sapi/cgi/cgi_main.c, and sapi/fpm/fpm/fpm_main.c.
- Vulnerability: CVE-2018-17082
  - CVSS Score: 4.3
  - Description: The Apache2 component in PHP before 5.6.38, 7.0.x before 7.0.32, 7.1.x before 7.1.22, and 7.2.x before 7.2.10 allows XSS via the body of a "Transfer-Encoding: chunked" request, because the bucket brigade is mishandled in the php_handler function in sapi/apache2handler/sapi_apache2.c.
- Vulnerability: CVE-2013-5704
  - CVSS Score: 5
  - Description: The mod_headers module in the Apache HTTP Server 2.2.22 allows remote attackers to bypass "RequestHeader unset" directives by placing a header in the trailer portion of data sent with chunked transfer coding. NOTE: the vendor states "this is not a security issue in httpd as such."

- Vulnerability: CVE-2019-9639
  - CVSS Score: 5
  - Description: An issue was discovered in the EXIF component in PHP before 7.1.27, 7.2.x before 7.2.16, and 7.3.x before 7.3.3. There is an uninitialized read in exif_process_IFD_in_MAKERNOTE because of mishandling the data_len variable.
- Vulnerability: CVE-2019-9638
  - CVSS Score: 5
  - Description: An issue was discovered in the EXIF component in PHP before 7.1.27, 7.2.x before 7.2.16, and 7.3.x before 7.3.3. There is an uninitialized read in exif_process_IFD_in_MAKERNOTE because of mishandling the maker_note->offset relationship to value_len.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2016-1903
  - CVSS Score: 6.4
  - Description: The gdImageRotateInterpolated function in ext/gd/libgd/gd_interpolation.c in PHP before 5.5.31, 5.6.x before 5.6.17, and 7.x before 7.0.2 allows remote attackers to obtain sensitive information or cause a denial of service (out-of-bounds read and application crash) via a large bgd_color argument to the imagerotate function.
- Vulnerability: CVE-2013-7456
  - CVSS Score: 6.8
  - Description: gd_interpolation.c in the GD Graphics Library (aka libgd) before 2.1.1, as used in PHP before 5.5.36, 5.6.x before 5.6.22, and 7.x before 7.0.7, allows remote attackers to cause a denial of service (out-of-bounds read) or possibly have unspecified other impact via a crafted image that is mishandled by the imagescale function.
- Vulnerability: CVE-2014-2020
  - CVSS Score: 5
  - Description: ext/gd/gd.c in PHP 5.5.x before 5.5.9 does not check data types, which might allow remote attackers to obtain sensitive information by using a (1) string or (2) array data type in place of a numeric data type, as demonstrated by an imagecrop function call with a string for the x dimension value, a different vulnerability than CVE-2013-7226.
- Vulnerability: CVE-2015-0273
  - CVSS Score: 7.5
  - Description: Multiple use-after-free vulnerabilities in ext/date/php_date.c in PHP before 5.4.38, 5.5.x before 5.5.22, and 5.6.x before 5.6.6 allow remote attackers to execute arbitrary code via crafted serialized input containing a (1) R or (2) r type specifier in (a) DateTimeZone data handled by the php_date_timezone_initialize_from_hash function or (b) DateTime data handled by the php_date_initialize_from_hash function.
- Vulnerability: CVE-2019-9637

  - CVSS Score: 5
  - Description: An issue was discovered in PHP before 7.1.27, 7.2.x before 7.2.16, and 7.3.x before 7.3.3. Due to the way rename() across filesystems is implemented, it is possible that file being renamed is briefly available with wrong permissions while the rename is ongoing, thus enabling unauthorized users to access the data.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2012-4558
  - CVSS Score: 4.3
  - Description: Multiple cross-site scripting (XSS) vulnerabilities in the balancer_handler function in the manager interface in mod_proxy_balancer.c in the mod_proxy_balancer module in the Apache HTTP Server 2.2.x before 2.2.24-dev and 2.4.x before 2.4.4 allow remote attackers to inject arbitrary web script or HTML via a crafted string.
- Vulnerability: CVE-2015-4602
  - CVSS Score: 10
  - Description: The __PHP_Incomplete_Class function in ext/standard/incomplete_class.c in PHP before 5.4.40, 5.5.x before 5.5.24, and 5.6.x before 5.6.8 allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via an unexpected data type, related to a "type confusion" issue.
- Vulnerability: CVE-2017-12868
  - CVSS Score: 7.5
  - Description: The secureCompare method in lib/SimpleSAML/Utils/Crypto.php in SimpleSAMLphp 1.14.13 and earlier, when used with PHP before 5.6, allows attackers to conduct session fixation attacks or possibly bypass authentication by leveraging missing character conversions before an XOR operation.
- Vulnerability: CVE-2015-4601
  - CVSS Score: 10
  - Description: PHP before 5.6.7 might allow remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via an unexpected data type, related to "type confusion" issues in (1) ext/soap/php_encoding.c, (2) ext/soap/php_http.c, and (3) ext/soap/soap.c, a different issue than CVE-2015-4600.
- Vulnerability: CVE-2015-4600
  - CVSS Score: 10
  - Description: The SoapClient implementation in PHP before 5.4.40, 5.5.x before 5.5.24, and 5.6.x before 5.6.8 allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via an unexpected data type, related to "type confusion" issues in the (1) SoapClient::__getLastRequest, (2) SoapClient::__getLastResponse, (3) SoapClient::__getLastRequestHeaders, (4) SoapClient::__getLastResponseHeaders, (5) SoapClient::__getCookies, and (6) SoapClient::__setCookie methods.

- Vulnerability: CVE-2015-4603
  - CVSS Score: 10
  - Description: The exception::getTraceAsString function in Zend/zend_exceptions.c in PHP before 5.4.40, 5.5.x before 5.5.24, and 5.6.x before 5.6.8 allows remote attackers to execute arbitrary code via an unexpected data type, related to a "type confusion" issue.
- Vulnerability: CVE-2018-14883
  - CVSS Score: 5
  - Description: An issue was discovered in PHP before 5.6.37, 7.0.x before 7.0.31, 7.1.x before 7.1.20, and 7.2.x before 7.2.8. An Integer Overflow leads to a heap-based buffer over-read in exif_thumbnail_extract of exif.c.
- Vulnerability: CVE-2015-4605
  - CVSS Score: 5
  - Description: The mcopy function in softmagic.c in file 5.x, as used in the Fileinfo component in PHP before 5.4.40, 5.5.x before 5.5.24, and 5.6.x before 5.6.8, does not properly restrict a certain offset value, which allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a crafted string that is mishandled by a "Python script text executable" rule.
- Vulnerability: CVE-2015-4604
  - CVSS Score: 5
  - Description: The mget function in softmagic.c in file 5.x, as used in the Fileinfo component in PHP before 5.4.40, 5.5.x before 5.5.24, and 5.6.x before 5.6.8, does not properly maintain a certain pointer relationship, which allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a crafted string that is mishandled by a "Python script text executable" rule.
- Vulnerability: CVE-2017-9788
  - CVSS Score: 6.4
  - Description: In Apache httpd before 2.2.34 and 2.4.x before 2.4.27, the value placeholder in [Proxy-]Authorization headers of type 'Digest' was not initialized or reset before or between successive key=value assignments by mod_auth_digest. Providing an initial key with no '=' assignment could reflect the stale value of uninitialized pool memory used by the prior request, leading to leakage of potentially confidential information, and a segfault in other cases resulting in denial of service.
- Vulnerability: CVE-2014-3597
  - CVSS Score: 6.8
  - Description: Multiple buffer overflows in the php_parserr function in ext/standard/dns.c in PHP before 5.4.32 and 5.5.x before 5.5.16 allow remote DNS servers to cause a denial of service (application crash) or possibly execute arbitrary code via a crafted DNS record, related to the dns_get_record function and the dn_expand function. NOTE: this issue exists because of an incomplete fix for CVE-2014-4049.
- Vulnerability: CVE-2013-4248
  - CVSS Score: 4.3

  - Description: The openssl_x509_parse function in openssl.c in the OpenSSL module in PHP before 5.4.18 and 5.5.x before 5.5.2 does not properly handle a '\{}0' character in a domain name in the Subject Alternative Name field of an X.509 certificate, which allows man-in-the-middle attackers to spoof arbitrary SSL servers via a crafted certificate issued by a legitimate Certification Authority, a related issue to CVE-2009-2408.

- Vulnerability: CVE-2014-4670
  - CVSS Score: 4.6
  - Description: Use-after-free vulnerability in ext/spl/spl_dllist.c in the SPL component in PHP through 5.5.14 allows context-dependent attackers to cause a denial of service or possibly have unspecified other impact via crafted iterator usage within applications in certain web-hosting environments.

- Vulnerability: CVE-2014-9912
  - CVSS Score: 7.5
  - Description: The get_icu_disp_value_src_php function in ext/intl/locale/locale_methods.c in PHP before 5.3.29, 5.4.x before 5.4.30, and 5.5.x before 5.5.14 does not properly restrict calls to the ICU uresbund.cpp component, which allows remote attackers to cause a denial of service (buffer overflow) or possibly have unspecified other impact via a locale_get_display_name call with a long first argument.

- Vulnerability: CVE-2014-0237
  - CVSS Score: 5
  - Description: The cdf_unpack_summary_info function in cdf.c in the Fileinfo component in PHP before 5.4.29 and 5.5.x before 5.5.13 allows remote attackers to cause a denial of service (performance degradation) by triggering many file_printf calls.

- Vulnerability: CVE-2016-5093
  - CVSS Score: 7.5
  - Description: The get_icu_value_internal function in ext/intl/locale/locale_methods.c in PHP before 5.5.36, 5.6.x before 5.6.22, and 7.x before 7.0.7 does not ensure the presence of a '\{}0' character, which allows remote attackers to cause a denial of service (out-of-bounds read) or possibly have unspecified other impact via a crafted locale_get_primary_language call.

- Vulnerability: CVE-2014-4049
  - CVSS Score: 5.1
  - Description: Heap-based buffer overflow in the php_parserr function in ext/standard/dns.c in PHP 5.6.0beta4 and earlier allows remote servers to cause a denial of service (crash) and possibly execute arbitrary code via a crafted DNS TXT record, related to the dns_get_record function.

- Vulnerability: CVE-2016-5096
  - CVSS Score: 7.5
  - Description: Integer overflow in the fread function in ext/standard/file.c in PHP before 5.5.36 and 5.6.x before 5.6.22 allows remote attackers to cause a denial of service or possibly have unspecified other impact via a large integer in the second argument.

- Vulnerability: CVE-2014-9653

  - CVSS Score: 7.5
  - Description: readelf.c in file before 5.22, as used in the Fileinfo component in PHP before 5.4.37, 5.5.x before 5.5.21, and 5.6.x before 5.6.5, does not consider that pread calls sometimes read only a subset of the available data, which allows remote attackers to cause a denial of service (uninitialized memory access) or possibly have unspecified other impact via a crafted ELF file.

- Vulnerability: CVE-2016-5094
  - CVSS Score: 7.5
  - Description: Integer overflow in the php_html_entities function in ext/standard/html.c in PHP before 5.5.36 and 5.6.x before 5.6.22 allows remote attackers to cause a denial of service or possibly have unspecified other impact by triggering a large output string from the htmlspecialchars function.

- Vulnerability: CVE-2016-5095
  - CVSS Score: 7.5
  - Description: Integer overflow in the php_escape_html_entities_ex function in ext/standard/html.c in PHP before 5.5.36 and 5.6.x before 5.6.22 allows remote attackers to cause a denial of service or possibly have unspecified other impact by triggering a large output string from a FILTER_SANITIZE_FULL_SPECIAL_CHARS filter_var call. NOTE: this vulnerability exists because of an incomplete fix for CVE-2016-5094.

- Vulnerability: CVE-2016-4543
  - CVSS Score: 7.5
  - Description: The exif_process_IFD_in_JPEG function in ext/exif/exif.c in PHP before 5.5.35, 5.6.x before 5.6.21, and 7.x before 7.0.6 does not validate IFD sizes, which allows remote attackers to cause a denial of service (out-of-bounds read) or possibly have unspecified other impact via crafted header data.

- Vulnerability: CVE-2016-4542
  - CVSS Score: 7.5
  - Description: The exif_process_IFD_TAG function in ext/exif/exif.c in PHP before 5.5.35, 5.6.x before 5.6.21, and 7.x before 7.0.6 does not properly construct spprintf arguments, which allows remote attackers to cause a denial of service (out-of-bounds read) or possibly have unspecified other impact via crafted header data.

- Vulnerability: CVE-2016-4541
  - CVSS Score: 7.5
  - Description: The grapheme_strpos function in ext/intl/grapheme/grapheme_string.c in PHP before 5.5.35, 5.6.x before 5.6.21, and 7.x before 7.0.6 allows remote attackers to cause a denial of service (out-of-bounds read) or possibly have unspecified other impact via a negative offset.

- Vulnerability: CVE-2016-4540
  - CVSS Score: 7.5
  - Description: The grapheme_stripos function in ext/intl/grapheme/grapheme_string.c in PHP before 5.5.35, 5.6.x before 5.6.21, and 7.x before 7.0.6 allows remote attackers to cause a denial of service (out-of-bounds read) or possibly have unspecified other impact via a negative offset.

- Vulnerability: CVE-2017-7963

  - CVSS Score: 5
  - Description: The GNU Multiple Precision Arithmetic Library (GMP) interfaces for PHP through 7.1.4 allow attackers to cause a denial of service (memory consumption and application crash) via operations on long strings. NOTE: the vendor disputes this, stating "There is no security issue here, because GMP safely aborts in case of an OOM condition. The only attack vector here is denial of service. However, if you allow attacker-controlled, unbounded allocations you have a DoS vector regardless of GMP's OOM behavior.

- Vulnerability: CVE-2014-3515
  - CVSS Score: 7.5
  - Description: The SPL component in PHP before 5.4.30 and 5.5.x before 5.5.14 incorrectly anticipates that certain data structures will have the array data type after unserialization, which allows remote attackers to execute arbitrary code via a crafted string that triggers use of a Hashtable destructor, related to "type confusion" issues in (1) ArrayObject and (2) SPLObjectStorage.

- Vulnerability: CVE-2014-0238
  - CVSS Score: 5
  - Description: The cdf_read_property_info function in cdf.c in the Fileinfo component in PHP before 5.4.29 and 5.5.x before 5.5.13 allows remote attackers to cause a denial of service (infinite loop or out-of-bounds memory access) via a vector that (1) has zero length or (2) is too long.

- Vulnerability: CVE-2016-5399
  - CVSS Score: 6.8
  - Description: The bzread function in ext/bz2/bz2.c in PHP before 5.5.38, 5.6.x before 5.6.24, and 7.x before 7.0.9 allows remote attackers to cause a denial of service (out-of-bounds write) or execute arbitrary code via a crafted bz2 archive.

- Vulnerability: CVE-2019-9023
  - CVSS Score: 7.5
  - Description: An issue was discovered in PHP before 5.6.40, 7.x before 7.1.26, 7.2.x before 7.2.14, and 7.3.x before 7.3.1. A number of heap-based buffer over-read instances are present in mbstring regular expression functions when supplied with invalid multibyte data. These occur in ext/mbstring/oniguruma/regcomp.c, ext/mbstring/oniguruma/regexec.c, ext/mbstring/oniguruma/regparse.c, ext/mbstring/oniguruma/enc/unicode.c, and ext/mbstring/oniguruma/src/utf32_be when a multibyte regular expression pattern contains invalid multibyte sequences.

- Vulnerability: CVE-2019-9020
  - CVSS Score: 7.5
  - Description: An issue was discovered in PHP before 5.6.40, 7.x before 7.1.26, 7.2.x before 7.2.14, and 7.3.x before 7.3.1. Invalid input to the function xmlrpc_decode() can lead to an invalid memory access (heap out of bounds read or read after free). This is related to xml_elem_parse_buf in ext/xmlrpc/libxmlrpc/xml_element.c.

- Vulnerability: CVE-2019-9021
  - CVSS Score: 7.5

  - Description: An issue was discovered in PHP before 5.6.40, 7.x before 7.1.26, 7.2.x before 7.2.14, and 7.3.x before 7.3.1. A heap-based buffer over-read in PHAR reading functions in the PHAR extension may allow an attacker to read allocated or unallocated memory past the actual data when trying to parse the file name, a different vulnerability than CVE-2018-20783. This is related to phar_detect_phar_fname_ext in ext/phar/phar.c.

- Vulnerability: CVE-2019-9024
  - CVSS Score: 5
  - Description: An issue was discovered in PHP before 5.6.40, 7.x before 7.1.26, 7.2.x before 7.2.14, and 7.3.x before 7.3.1. xmlrpc_decode() can allow a hostile XMLRPC server to cause PHP to read memory outside of allocated areas in base64_decode_xmlrpc in ext/xmlrpc/libxmlrpc/base64.c.

- Vulnerability: CVE-2016-3167
  - CVSS Score: 6.4
  - Description: Open redirect vulnerability in the drupal_goto function in Drupal 6.x before 6.38, when used with PHP before 5.4.7, allows remote attackers to redirect users to arbitrary web sites and conduct phishing attacks via a double-encoded URL in the "destination" parameter.

- Vulnerability: CVE-2014-2497
  - CVSS Score: 4.3
  - Description: The gdImageCreateFromXpm function in gdxpm.c in libgd, as used in PHP 5.4.26 and earlier, allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a crafted color table in an XPM file.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2016-6291
  - CVSS Score: 7.5
  - Description: The exif_process_IFD_in_MAKERNOTE function in ext/exif/exif.c in PHP before 5.5.38, 5.6.x before 5.6.24, and 7.x before 7.0.9 allows remote attackers to cause a denial of service (out-of-bounds array access and memory corruption), obtain sensitive information from process memory, or possibly have unspecified other impact via a crafted JPEG image.

- Vulnerability: CVE-2016-6290
  - CVSS Score: 7.5
  - Description: ext/session/session.c in PHP before 5.5.38, 5.6.x before 5.6.24, and 7.x before 7.0.9 does not properly maintain a certain hash data structure, which allows remote attackers to cause a denial of service (use-after-free) or possibly have unspecified other impact via vectors related to session deserialization.

- Vulnerability: CVE-2016-6292
  - CVSS Score: 4.3

  - Description: The exif_process_user_comment function in ext/exif/exif.c in PHP before 5.5.38, 5.6.x before 5.6.24, and 7.x before 7.0.9 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a crafted JPEG image.

- Vulnerability: CVE-2016-6295
  - CVSS Score: 7.5
  - Description: ext/snmp/snmp.c in PHP before 5.5.38, 5.6.x before 5.6.24, and 7.x before 7.0.9 improperly interacts with the unserialize implementation and garbage collection, which allows remote attackers to cause a denial of service (use-after-free and application crash) or possibly have unspecified other impact via crafted serialized data, a related issue to CVE-2016-5773.
- Vulnerability: CVE-2016-6294
  - CVSS Score: 7.5
  - Description: The locale_accept_from_http function in ext/intl/locale/locale_methods.c in PHP before 5.5.38, 5.6.x before 5.6.24, and 7.x before 7.0.9 does not properly restrict calls to the ICU uloc_acceptLanguageFromHTTP function, which allows remote attackers to cause a denial of service (out-of-bounds read) or possibly have unspecified other impact via a call with a long argument.
- Vulnerability: CVE-2016-6297
  - CVSS Score: 6.8
  - Description: Integer overflow in the php_stream_zip_opener function in ext/zip/zip_stream.c in PHP before 5.5.38, 5.6.x before 5.6.24, and 7.x before 7.0.9 allows remote attackers to cause a denial of service (stack-based buffer overflow) or possibly have unspecified other impact via a crafted zip:// URL.
- Vulnerability: CVE-2016-6296
  - CVSS Score: 7.5
  - Description: Integer signedness error in the simplestring_addn function in simplestring.c in xmlrpc-epi through 0.54.2, as used in PHP before 5.5.38, 5.6.x before 5.6.24, and 7.x before 7.0.9, allows remote attackers to cause a denial of service (heap-based buffer overflow) or possibly have unspecified other impact via a long first argument to the PHP xmlrpc_encode_request function.
- Vulnerability: CVE-2015-4642
  - CVSS Score: 10
  - Description: The escapeshellarg function in ext/standard/exec.c in PHP before 5.4.42, 5.5.x before 5.5.26, and 5.6.x before 5.6.10 on Windows allows remote attackers to execute arbitrary OS commands via a crafted string to an application that accepts command-line arguments for a call to the PHP system function.
- Vulnerability: CVE-2018-1301
  - CVSS Score: 4.3
  - Description: A specially crafted request could have crashed the Apache HTTP Server prior to version 2.4.30, due to an out of bound access after a size limit is reached by reading the HTTP header. This vulnerability is considered very hard if not impossible to trigger in non-debug mode (both log and build level), so it is classified as low risk for common server usage.

- Vulnerability: CVE-2015-1351
  - CVSS Score: 7.5
  - Description: Use-after-free vulnerability in the _zend_shared_memdup function in zend_shared_alloc.c in the OPcache extension in PHP through 5.6.7 allows remote attackers to cause a denial of service or possibly have unspecified other impact via unknown vectors.
- Vulnerability: CVE-2015-1352
  - CVSS Score: 5
  - Description: The build_tablename function in pgsql.c in the PostgreSQL (aka pgsql) extension in PHP through 5.6.7 does not validate token extraction for table names, which allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a crafted name.
- Vulnerability: CVE-2012-3450
  - CVSS Score: 2.6
  - Description: pdo_sql_parser.re in the PDO extension in PHP before 5.3.14 and 5.4.x before 5.4.4 does not properly determine the end of the query string during parsing of prepared statements, which allows remote attackers to cause a denial of service (out-of-bounds read and application crash) via a crafted parameter value.
- Vulnerability: CVE-2013-1862
  - CVSS Score: 5.1
  - Description: mod_rewrite.c in the mod_rewrite module in the Apache HTTP Server 2.2.x before 2.2.25 writes data to a log file without sanitizing non-printable characters, which might allow remote attackers to execute arbitrary commands via an HTTP request containing an escape sequence for a terminal emulator.
- Vulnerability: CVE-2015-4116
  - CVSS Score: 7.5
  - Description: Use-after-free vulnerability in the spl_ptr_heap_insert function in ext/spl/spl_heap.c in PHP before 5.5.27 and 5.6.x before 5.6.11 allows remote attackers to execute arbitrary code by triggering a failed SplMinHeap::compare operation.
- Vulnerability: CVE-2015-8865
  - CVSS Score: 7.5
  - Description: The file_check_mem function in funcs.c in file before 5.23, as used in the Fileinfo component in PHP before 5.5.34, 5.6.x before 5.6.20, and 7.x before 7.0.5, mishandles continuation-level jumps, which allows context-dependent attackers to cause a denial of service (buffer overflow and application crash) or possibly execute arbitrary code via a crafted magic file.
- Vulnerability: CVE-2014-9705
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the enchant_broker_request_dict function in ext/enchant/enchant.c in PHP before 5.4.38, 5.5.x before 5.5.22, and 5.6.x before 5.6.6 allows remote attackers to execute arbitrary code via vectors that trigger creation of multiple dictionaries.
- Vulnerability: CVE-2016-3185

  - CVSS Score: 6.4
  - Description: The make_http_soap_request function in ext/soap/php_http.c in PHP before 5.4.44, 5.5.x before 5.5.28, 5.6.x before 5.6.12, and 7.x before 7.0.4 allows remote attackers to obtain sensitive information from process memory or cause a denial of service (type confusion and application crash) via crafted serialized _cookies data, related to the SoapClient::__call method in ext/soap/soap.c.

- Vulnerability: CVE-2016-10712
  - CVSS Score: 5
  - Description: In PHP before 5.5.32, 5.6.x before 5.6.18, and 7.x before 7.0.3, all of the return values of stream_get_meta_data can be controlled if the input can be controlled (e.g., during file uploads). For example, a "$uri = stream_get_meta_data(fopen($file, "r"))['uri']" call mishandles the case where $file is data:text/plain;uri=eviluri, -- in other words, metadata can be set by an attacker.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2015-5589
  - CVSS Score: 10
  - Description: The phar_convert_to_other function in ext/phar/phar_object.c in PHP before 5.4.43, 5.5.x before 5.5.27, and 5.6.x before 5.6.11 does not validate a file pointer before a close operation, which allows remote attackers to cause a denial of service (segmentation fault) or possibly have unspecified other impact via a crafted TAR archive that is mishandled in a Phar::convertToData call.

- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.

- Vulnerability: CVE-2016-9138
  - CVSS Score: 7.5
  - Description: PHP through 5.6.27 and 7.x through 7.0.12 mishandles property modification during __wakeup processing, which allows remote attackers to cause a denial of service or possibly have unspecified other impact via crafted serialized data, as demonstrated by Exception::__toString with DateInterval::__wakeup.

- Vulnerability: CVE-2018-7584
  - CVSS Score: 7.5
  - Description: In PHP through 5.6.33, 7.0.x before 7.0.28, 7.1.x through 7.1.14, and 7.2.x through 7.2.2, there is a stack-based buffer under-read while parsing an HTTP response in the php_stream_url_wrap_http_ex function in ext/standard/http_fopen_wrapper.c. This subsequently results in copying a large string.

- Vulnerability: CVE-2016-10397
  - CVSS Score: 5
  - Description: In PHP before 5.6.28 and 7.x before 7.0.13, incorrect handling of various URI components in the URL parser could be used by attackers to bypass hostname-specific URL checks, as demonstrated by evil.example.com:80#@good.example.com/ and evil.example.com:80?@good.example.com/ inputs to the parse_url function (implemented in the php_url_parse_ex function in ext/standard/url.c).
- Vulnerability: CVE-2011-4718
  - CVSS Score: 6.8
  - Description: Session fixation vulnerability in the Sessions subsystem in PHP before 5.5.2 allows remote attackers to hijack web sessions by specifying a session ID.
- Vulnerability: CVE-2014-3669
  - CVSS Score: 7.5
  - Description: Integer overflow in the object_custom function in ext/standard/var_unserializer.c in PHP before 5.4.34, 5.5.x before 5.5.18, and 5.6.x before 5.6.2 allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via an argument to the unserialize function that triggers calculation of a large length value.
- Vulnerability: CVE-2018-5711
  - CVSS Score: 4.3
  - Description: gd_gif_in.c in the GD Graphics Library (aka libgd), as used in PHP before 5.6.33, 7.0.x before 7.0.27, 7.1.x before 7.1.13, and 7.2.x before 7.2.1, has an integer signedness error that leads to an infinite loop via a crafted GIF file, as demonstrated by a call to the imagecreatefromgif or imagecreatefromstring PHP function. This is related to GetCode_ and gdImageCreateFromGifCtx.
- Vulnerability: CVE-2014-0226
  - CVSS Score: 6.8
  - Description: Race condition in the mod_status module in the Apache HTTP Server before 2.4.10 allows remote attackers to cause a denial of service (heap-based buffer overflow), or possibly obtain sensitive credential information or execute arbitrary code, via a crafted request that triggers improper scoreboard handling within the status_handler function in modules/generators/mod_status.c and the lua_ap_scoreboard_worker function in modules/lua/lua_request.c.
- Vulnerability: CVE-2017-11143
  - CVSS Score: 5
  - Description: In PHP before 5.6.31, an invalid free in the WDDX deserialization of boolean parameters could be used by attackers able to inject XML for deserialization to crash the PHP interpreter, related to an invalid free for an empty boolean element in ext/wddx/wddx.c.
- Vulnerability: CVE-2016-10161
  - CVSS Score: 5

  - Description: The object_common1 function in ext/standard/var_unserializer.c in PHP before 5.6.30, 7.0.x before 7.0.15, and 7.1.x before 7.1.1 allows remote attackers to cause a denial of service (buffer over-read and application crash) via crafted serialized data that is mishandled in a finish_nested_data call.

- Vulnerability: CVE-2015-3412
  - CVSS Score: 5
  - Description: PHP before 5.4.40, 5.5.x before 5.5.24, and 5.6.x before 5.6.8 does not ensure that pathnames lack %00 sequences, which might allow remote attackers to read arbitrary files via crafted input to an application that calls the stream_resolve_include_path function in ext/standard/streamsfuncs.c, as demonstrated by a filename\{}0.extension attack that bypasses an intended configuration in which client users may read files with only one specific extension.
- Vulnerability: CVE-2016-5767
  - CVSS Score: 6.8
  - Description: Integer overflow in the gdImageCreate function in gd.c in the GD Graphics Library (aka libgd) before 2.0.34RC1, as used in PHP before 5.5.37, 5.6.x before 5.6.23, and 7.x before 7.0.8, allows remote attackers to cause a denial of service (heap-based buffer overflow and application crash) or possibly have unspecified other impact via a crafted image dimensions.
- Vulnerability: CVE-2014-0118
  - CVSS Score: 4.3
  - Description: The deflate_in_filter function in mod_deflate.c in the mod_deflate module in the Apache HTTP Server before 2.4.10, when request body decompression is enabled, allows remote attackers to cause a denial of service (resource consumption) via crafted request data that decompresses to a much larger size.
- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2013-4635
  - CVSS Score: 5
  - Description: Integer overflow in the SdnToJewish function in jewish.c in the Calendar component in PHP before 5.3.26 and 5.4.x before 5.4.16 allows context-dependent attackers to cause a denial of service (application hang) via a large argument to the jdtojewish function.
- Vulnerability: CVE-2015-4599
  - CVSS Score: 10
  - Description: The SoapFault::__toString method in ext/soap/soap.c in PHP before 5.4.40, 5.5.x before 5.5.24, and 5.6.x before 5.6.8 allows remote attackers to obtain sensitive information, cause a denial of service (application crash), or possibly execute arbitrary code via an unexpected data type, related to a "type confusion" issue.
- Vulnerability: CVE-2015-4598

  - CVSS Score: 7.5
  - Description: PHP before 5.4.42, 5.5.x before 5.5.26, and 5.6.x before 5.6.10 does not ensure that pathnames lack %00 sequences, which might allow remote attackers to read or write to arbitrary files via crafted input to an application that calls (1) a DOMDocument save method or (2) the GD imagepsloadfont function, as demonstrated by a filename\{}0.html attack that bypasses an intended configuration in which client users may write to only .html files.

- Vulnerability: CVE-2017-7679
  - CVSS Score: 7.5
  - Description: In Apache httpd 2.2.x before 2.2.33 and 2.4.x before 2.4.26, mod_mime can read one byte past the end of a buffer when sending a malicious Content-Type response header.

- Vulnerability: CVE-2015-2783
  - CVSS Score: 5.8
  - Description: ext/phar/phar.c in PHP before 5.4.40, 5.5.x before 5.5.24, and 5.6.x before 5.6.8 allows remote attackers to obtain sensitive information from process memory or cause a denial of service (buffer over-read and application crash) via a crafted length value in conjunction with crafted serialized data in a phar archive, related to the phar_parse_metadata and phar_parse_pharfile functions.

- Vulnerability: CVE-2015-9253
  - CVSS Score: 6.8
  - Description: An issue was discovered in PHP 7.3.x before 7.3.0alpha3, 7.2.x before 7.2.8, and before 7.1.20. The php-fpm master process restarts a child process in an endless loop when using program execution functions (e.g., passthru, exec, shell_exec, or system) with a non-blocking STDIN stream, causing this master process to consume 100% of the CPU, and consume disk space with a large volume of error logs, as demonstrated by an attack by a customer of a shared-hosting facility.

- Vulnerability: CVE-2014-3981
  - CVSS Score: 3.3
  - Description: acinclude.m4, as used in the configure script in PHP 5.5.13 and earlier, allows local users to overwrite arbitrary files via a symlink attack on the /tmp/phpglibccheck file.

- Vulnerability: CVE-2017-9226
  - CVSS Score: 7.5
  - Description: An issue was discovered in Oniguruma 6.2.0, as used in Oniguruma-mod in Ruby through 2.4.1 and mbstring in PHP through 7.1.5. A heap out-of-bounds write or read occurs in next_state_val() during regular expression compilation. Octal numbers larger than 0xff are not handled correctly in fetch_token() and fetch_token_in_cc(). A malformed regular expression containing an octal number in the form of '\{}700' would produce an invalid code point value larger than 0xff in next_state_val(), resulting in an out-of-bounds write memory corruption.

- Vulnerability: CVE-2012-4388
  - CVSS Score: 4.3

  - Description: The sapi_header_op function in main/SAPI.c in PHP 5.4.0RC2 through 5.4.0 does not properly determine a pointer during checks for %0D sequences (aka carriage return characters), which allows remote attackers to bypass an HTTP response-splitting protection mechanism via a crafted URL, related to improper interaction between the PHP header function and certain browsers, as demonstrated by Internet Explorer and Google Chrome. NOTE: this vulnerability exists because of an incorrect fix for CVE-2011-1398.

- Vulnerability: CVE-2017-9224
  - CVSS Score: 7.5
  - Description: An issue was discovered in Oniguruma 6.2.0, as used in Oniguruma-mod in Ruby through 2.4.1 and mbstring in PHP through 7.1.5. A stack out-of-bounds read occurs in match_at() during regular expression searching. A logical error involving order of validation and access in match_at() could result in an out-of-bounds read from a stack buffer.
- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.
- Vulnerability: CVE-2015-5590
  - CVSS Score: 7.5
  - Description: Stack-based buffer overflow in the phar_fix_filepath function in ext/phar/phar.c in PHP before 5.4.43, 5.5.x before 5.5.27, and 5.6.x before 5.6.11 allows remote attackers to cause a denial of service or possibly have unspecified other impact via a large length value, as demonstrated by mishandling of an e-mail attachment by the imap PHP extension.
- Vulnerability: CVE-2014-0236
  - CVSS Score: 5
  - Description: file before 5.18, as used in the Fileinfo component in PHP before 5.6.0, allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a zero root_storage value in a CDF file, related to cdf.c and readcdf.c.
- Vulnerability: CVE-2016-7132
  - CVSS Score: 5
  - Description: ext/wddx/wddx.c in PHP before 5.6.25 and 7.x before 7.0.10 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) or possibly have unspecified other impact via an invalid wddxPacket XML document that is mishandled in a wddx_deserialize call, as demonstrated by a stray element inside a boolean element, leading to incorrect pop processing.

- Vulnerability: CVE-2016-7131
  - CVSS Score: 5
  - Description: ext/wddx/wddx.c in PHP before 5.6.25 and 7.x before 7.0.10 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) or possibly have unspecified other impact via a malformed wddxPacket XML document that is mishandled in a wddx_deserialize call, as demonstrated by a tag that lacks a < (less than) character.
- Vulnerability: CVE-2016-7130
  - CVSS Score: 5
  - Description: The php_wddx_pop_element function in ext/wddx/wddx.c in PHP before 5.6.25 and 7.x before 7.0.10 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) or possibly have unspecified other impact via an invalid base64 binary value, as demonstrated by a wddx_deserialize call that mishandles a binary element in a wddxPacket XML document.
- Vulnerability: CVE-2019-6977
  - CVSS Score: 6.8
  - Description: gdImageColorMatch in gd_color_match.c in the GD Graphics Library (aka LibGD) 2.2.5, as used in the imagecolormatch function in PHP before 5.6.40, 7.x before 7.1.26, 7.2.x before 7.2.14, and 7.3.x before 7.3.1, has a heap-based buffer overflow. This can be exploited by an attacker who is able to trigger imagecolormatch calls with crafted image data.
- Vulnerability: CVE-2013-6438
  - CVSS Score: 5
  - Description: The dav_xml_get_cdata function in main/util.c in the mod_dav module in the Apache HTTP Server before 2.4.8 does not properly remove whitespace characters from CDATA sections, which allows remote attackers to cause a denial of service (daemon crash) via a crafted DAV WRITE request.
- Vulnerability: CVE-2014-3478
  - CVSS Score: 5
  - Description: Buffer overflow in the mconvert function in softmagic.c in file before 5.19, as used in the Fileinfo component in PHP before 5.4.30 and 5.5.x before 5.5.14, allows remote attackers to cause a denial of service (application crash) via a crafted Pascal string in a FILE_PSTRING conversion.
- Vulnerability: CVE-2015-8873
  - CVSS Score: 5
  - Description: Stack consumption vulnerability in Zend/zend_exceptions.c in PHP before 5.4.44, 5.5.x before 5.5.28, and 5.6.x before 5.6.12 allows remote attackers to cause a denial of service (segmentation fault) via recursive method calls.
- Vulnerability: CVE-2018-1302
  - CVSS Score: 4.3

  - Description: When an HTTP/2 stream was destroyed after being handled, the Apache HTTP Server prior to version 2.4.30 could have written a NULL pointer potentially to an already freed memory. The memory pools maintained by the server make this vulnerability hard to trigger in usual configurations, the reporter and the team could not reproduce it outside debug builds, so it is classified as low risk.

- Vulnerability: CVE-2018-1303
  - CVSS Score: 5
  - Description: A specially crafted HTTP request header could have crashed the Apache HTTP Server prior to version 2.4.30 due to an out of bound read while preparing data to be cached in shared memory. It could be used as a Denial of Service attack against users of mod_cache_socache. The vulnerability is considered as low risk since mod_cache_socache is not widely used, mod_cache_disk is not concerned by this vulnerability.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2015-8877
  - CVSS Score: 5
  - Description: The gdImageScaleTwoPass function in gd_interpolation.c in the GD Graphics Library (aka libgd) before 2.2.0, as used in PHP before 5.6.12, uses inconsistent allocate and free approaches, which allows remote attackers to cause a denial of service (memory consumption) via a crafted call, as demonstrated by a call to the PHP imagescale function.

- Vulnerability: CVE-2015-8874
  - CVSS Score: 5
  - Description: Stack consumption vulnerability in GD in PHP before 5.6.12 allows remote attackers to cause a denial of service via a crafted imagefilltoborder call.

- Vulnerability: CVE-2014-9652
  - CVSS Score: 5
  - Description: The mconvert function in softmagic.c in file before 5.21, as used in the Fileinfo component in PHP before 5.4.37, 5.5.x before 5.5.21, and 5.6.x before 5.6.5, does not properly handle a certain string-length field during a copy of a truncated version of a Pascal string, which might allow remote attackers to cause a denial of service (out-of-bounds memory access and application crash) via a crafted file.

- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.

- Vulnerability: CVE-2015-8879
  - CVSS Score: 5

  - Description: The odbc_bindcols function in ext/odbc/php_odbc.c in PHP before 5.6.12 mishandles driver behavior for SQL_WVARCHAR columns, which allows remote attackers to cause a denial of service (application crash) in opportunistic circumstances by leveraging use of the odbc_fetch_array function to access a certain type of Microsoft SQL Server table.

- Vulnerability: CVE-2015-3307
  - CVSS Score: 7.5
  - Description: The phar_parse_metadata function in ext/phar/phar.c in PHP before 5.4.40, 5.5.x before 5.5.24, and 5.6.x before 5.6.8 allows remote attackers to cause a denial of service (heap metadata corruption) or possibly have unspecified other impact via a crafted tar archive.

- Vulnerability: CVE-2015-4021
  - CVSS Score: 5
  - Description: The phar_parse_tarfile function in ext/phar/tar.c in PHP before 5.4.41, 5.5.x before 5.5.25, and 5.6.x before 5.6.9 does not verify that the first character of a filename is different from the \{}0 character, which allows remote attackers to cause a denial of service (integer underflow and memory corruption) via a crafted entry in a tar archive.

- Vulnerability: CVE-2014-9425
  - CVSS Score: 7.5
  - Description: Double free vulnerability in the zend_ts_hash_graceful_destroy function in zend_ts_hash.c in the Zend Engine in PHP through 5.5.20 and 5.6.x through 5.6.4 allows remote attackers to cause a denial of service or possibly have unspecified other impact via unknown vectors.

- Vulnerability: CVE-2015-4022
  - CVSS Score: 7.5
  - Description: Integer overflow in the ftp_genlist function in ext/ftp/ftp.c in PHP before 5.4.41, 5.5.x before 5.5.25, and 5.6.x before 5.6.9 allows remote FTP servers to execute arbitrary code via a long reply to a LIST command, leading to a heap-based buffer overflow.

- Vulnerability: CVE-2015-4025
  - CVSS Score: 7.5
  - Description: PHP before 5.4.41, 5.5.x before 5.5.25, and 5.6.x before 5.6.9 truncates a pathname upon encountering a \{}x00 character in certain situations, which allows remote attackers to bypass intended extension restrictions and access files or directories with unexpected names via a crafted argument to (1) set_include_path, (2) tempnam, (3) rmdir, or (4) readlink. NOTE: this vulnerability exists because of an incomplete fix for CVE-2006-7243.

- Vulnerability: CVE-2015-4024
  - CVSS Score: 5
  - Description: Algorithmic complexity vulnerability in the multipart_buffer_headers function in main/rfc1867.c in PHP before 5.4.41, 5.5.x before 5.5.25, and 5.6.x before 5.6.9 allows remote attackers to cause a denial of service (CPU consumption) via crafted form data that triggers an improper order-of-growth outcome.

- Vulnerability: CVE-2015-4026

  - CVSS Score: 7.5
  - Description: The pcntl_exec implementation in PHP before 5.4.41, 5.5.x before 5.5.25, and 5.6.x before 5.6.9 truncates a pathname upon encountering a \{}x00 character, which might allow remote attackers to bypass intended extension restrictions and execute files with unexpected names via a crafted first argument. NOTE: this vulnerability exists because of an incomplete fix for CVE-2006-7243.

- Vulnerability: CVE-2015-4643
  - CVSS Score: 7.5
  - Description: Integer overflow in the ftp_genlist function in ext/ftp/ftp.c in PHP before 5.4.42, 5.5.x before 5.5.26, and 5.6.x before 5.6.10 allows remote FTP servers to execute arbitrary code via a long reply to a LIST command, leading to a heap-based buffer overflow. NOTE: this vulnerability exists because of an incomplete fix for CVE-2015-4022.

- Vulnerability: CVE-2015-6497
  - CVSS Score: 6.5
  - Description: The create function in app/code/core/Mage/Catalog/Model/Product/Api/V2.php in Magento Community Edition (CE) before 1.9.2.1 and Enterprise Edition (EE) before 1.14.2.1, when used with PHP before 5.4.24 or 5.5.8, allows remote authenticated users to execute arbitrary PHP code via the productData parameter to index.php/api/v2_soap.

- Vulnerability: CVE-2014-9427
  - CVSS Score: 7.5
  - Description: sapi/cgi/cgi_main.c in the CGI component in PHP through 5.4.36, 5.5.x through 5.5.20, and 5.6.x through 5.6.4, when mmap is used to read a .php file, does not properly consider the mapping's length during processing of an invalid file that begins with a # character and lacks a newline character, which causes an out-of-bounds read and might (1) allow remote attackers to obtain sensitive information from php-cgi process memory by leveraging the ability to upload a .php file or (2) trigger unexpected code execution if a valid PHP script is present in memory locations adjacent to the mapping.

- Vulnerability: CVE-2014-9426
  - CVSS Score: 7.5
  - Description: The apprentice_load function in libmagic/apprentice.c in the Fileinfo component in PHP through 5.6.4 attempts to perform a free operation on a stack-based character array, which allows remote attackers to cause a denial of service (memory corruption or application crash) or possibly have unspecified other impact via unknown vectors. NOTE: this is disputed by the vendor because the standard erealloc behavior makes the free operation unreachable

- Vulnerability: CVE-2016-10158
  - CVSS Score: 5
  - Description: The exif_convert_any_to_int function in ext/exif/exif.c in PHP before 5.6.30, 7.0.x before 7.0.15, and 7.1.x before 7.1.1 allows remote attackers to cause a denial of service (application crash) via crafted EXIF data that triggers an attempt to divide the minimum representable negative integer by -1.

- Vulnerability: CVE-2016-10159
  - CVSS Score: 5

  - Description: Integer overflow in the phar_parse_pharfile function in ext/phar/phar.c in PHP before 5.6.30 and 7.0.x before 7.0.15 allows remote attackers to cause a denial of service (memory consumption or application crash) via a truncated manifest entry in a PHAR archive.

- Vulnerability: CVE-2014-3670
  - CVSS Score: 6.8
  - Description: The exif_ifd_make_value function in exif.c in the EXIF extension in PHP before 5.4.34, 5.5.x before 5.5.18, and 5.6.x before 5.6.2 operates on floating-point arrays incorrectly, which allows remote attackers to cause a denial of service (heap memory corruption and application crash) or possibly execute arbitrary code via a crafted JPEG image with TIFF thumbnail data that is improperly handled by the exif_thumbnail function.
- Vulnerability: CVE-2016-5387
  - CVSS Score: 6.8
  - Description: The Apache HTTP Server through 2.4.23 follows RFC 3875 section 4.1.18 and therefore does not protect applications from the presence of untrusted client data in the HTTP_PROXY environment variable, which might allow remote attackers to redirect an application's outbound HTTP traffic to an arbitrary proxy server via a crafted Proxy header in an HTTP request, aka an "httpoxy" issue. NOTE: the vendor states "This mitigation has been assigned the identifier CVE-2016-5387"; in other words, this is not a CVE ID for a vulnerability.
- Vulnerability: CVE-2015-0228
  - CVSS Score: 5
  - Description: The lua_websocket_read function in lua_request.c in the mod_lua module in the Apache HTTP Server through 2.4.12 allows remote attackers to cause a denial of service (child-process crash) by sending a crafted WebSocket Ping frame after a Lua script has called the wsupgrade function.
- Vulnerability: CVE-2019-9641
  - CVSS Score: 7.5
  - Description: An issue was discovered in the EXIF component in PHP before 7.1.27, 7.2.x before 7.2.16, and 7.3.x before 7.3.3. There is an uninitialized read in exif_process_IFD_in_TIFF.
- Vulnerability: CVE-2016-8743
  - CVSS Score: 5
  - Description: Apache HTTP Server, in all releases prior to 2.2.32 and 2.4.25, was liberal in the whitespace accepted from requests and sent in response lines and headers. Accepting these different behaviors represented a security concern when httpd participates in any chain of proxies or interacts with back-end application servers, either through mod_proxy or using conventional CGI mechanisms, and may result in request smuggling, response splitting and cache pollution.
- Vulnerability: CVE-2012-3365
  - CVSS Score: 5
  - Description: The SQLite functionality in PHP before 5.3.15 allows remote attackers to bypass the open_basedir protection mechanism via unspecified vectors.
- Vulnerability: CVE-2018-15132

  - CVSS Score: 5
  - Description: An issue was discovered in ext/standard/link_win32.c in PHP before 5.6.37, 7.0.x before 7.0.31, 7.1.x before 7.1.20, and 7.2.x before 7.2.8. The linkinfo function on Windows doesn't implement the open_basedir check. This could be abused to find files on paths outside of the allowed directories.
- Vulnerability: CVE-2014-2270
  - CVSS Score: 4.3
  - Description: softmagic.c in file before 5.17 and libmagic allows context-dependent attackers to cause a denial of service (out-of-bounds memory access and crash) via crafted offsets in the softmagic of a PE executable.
- Vulnerability: CVE-2016-7124
  - CVSS Score: 7.5
  - Description: ext/standard/var_unserializer.c in PHP before 5.6.25 and 7.x before 7.0.10 mishandles certain invalid objects, which allows remote attackers to cause a denial of service or possibly have unspecified other impact via crafted serialized data that leads to a (1) __destruct call or (2) magic method call.
- Vulnerability: CVE-2016-7125
  - CVSS Score: 5
  - Description: ext/session/session.c in PHP before 5.6.25 and 7.x before 7.0.10 skips invalid session names in a way that triggers incorrect parsing, which allows remote attackers to inject arbitrary-type session data by leveraging control of a session name, as demonstrated by object injection.
- Vulnerability: CVE-2016-7126
  - CVSS Score: 7.5
  - Description: The imagetruecolortopalette function in ext/gd/gd.c in PHP before 5.6.25 and 7.x before 7.0.10 does not properly validate the number of colors, which allows remote attackers to cause a denial of service (select_colors allocation error and out-of-bounds write) or possibly have unspecified other impact via a large value in the third argument.
- Vulnerability: CVE-2016-7127
  - CVSS Score: 7.5
  - Description: The imagegammacorrect function in ext/gd/gd.c in PHP before 5.6.25 and 7.x before 7.0.10 does not properly validate gamma values, which allows remote attackers to cause a denial of service (out-of-bounds write) or possibly have unspecified other impact by providing different signs for the second and third arguments.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2016-7128
  - CVSS Score: 5

  - Description: The exif_process_IFD_in_TIFF function in ext/exif/exif.c in PHP before 5.6.25 and 7.x before 7.0.10 mishandles the case of a thumbnail offset that exceeds the file size, which allows remote attackers to obtain sensitive information from process memory via a crafted TIFF image.

- Vulnerability: CVE-2016-7129
  - CVSS Score: 7.5
  - Description: The php_wddx_process_data function in ext/wddx/wddx.c in PHP before 5.6.25 and 7.x before 7.0.10 allows remote attackers to cause a denial of service (segmentation fault) or possibly have unspecified other impact via an invalid ISO 8601 time value, as demonstrated by a wddx_deserialize call that mishandles a dateTime element in a wddxPacket XML document.
- Vulnerability: CVE-2011-1398
  - CVSS Score: 4.3
  - Description: The sapi_header_op function in main/SAPI.c in PHP before 5.3.11 and 5.4.x before 5.4.0RC2 does not check for %0D sequences (aka carriage return characters), which allows remote attackers to bypass an HTTP response-splitting protection mechanism via a crafted URL, related to improper interaction between the PHP header function and certain browsers, as demonstrated by Internet Explorer and Google Chrome.
- Vulnerability: CVE-2016-2554
  - CVSS Score: 10
  - Description: Stack-based buffer overflow in ext/phar/tar.c in PHP before 5.5.32, 5.6.x before 5.6.18, and 7.x before 7.0.3 allows remote attackers to cause a denial of service (application crash) or possibly have unspecified other impact via a crafted TAR archive.
- Vulnerability: CVE-2017-11628
  - CVSS Score: 6.8
  - Description: In PHP before 5.6.31, 7.x before 7.0.21, and 7.1.x before 7.1.7, a stack-based buffer overflow in the zend_ini_do_op() function in Zend/zend_ini_parser.c could cause a denial of service or potentially allow executing code. NOTE: this is only relevant for PHP applications that accept untrusted input (instead of the system's php.ini file) for the parse_ini_string or parse_ini_file function, e.g., a web application for syntax validation of php.ini directives.
- Vulnerability: CVE-2014-3480
  - CVSS Score: 4.3
  - Description: The cdf_count_chain function in cdf.c in file before 5.19, as used in the Fileinfo component in PHP before 5.4.30 and 5.5.x before 5.5.14, does not properly validate sector-count data, which allows remote attackers to cause a denial of service (application crash) via a crafted CDF file.
- Vulnerability: CVE-2017-12933
  - CVSS Score: 7.5
  - Description: The finish_nested_data function in ext/standard/var_unserializer.re in PHP before 5.6.31, 7.0.x before 7.0.21, and 7.1.x before 7.1.7 is prone to a buffer over-read while unserializing untrusted data. Exploitation of this issue can have an unspecified impact on the integrity of PHP.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2014-4721
  - CVSS Score: 2.6
  - Description: The phpinfo implementation in ext/standard/info.c in PHP before 5.4.30 and 5.5.x before 5.5.14 does not ensure use of the string data type for the PHP_AUTH_PW, PHP_AUTH_TYPE, PHP_AUTH_USER, and PHP_SELF variables, which might allow context-dependent attackers to obtain sensitive information from process memory by using the integer data type with crafted values, related to a "type confusion" vulnerability, as demonstrated by reading a private SSL key in an Apache HTTP Server web-hosting environment with mod_ssl and a PHP 5.3.x mod_php.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2014-9767
  - CVSS Score: 4.3
  - Description: Directory traversal vulnerability in the ZipArchive::extractTo function in ext/zip/php_zip.c in PHP before 5.4.45, 5.5.x before 5.5.29, and 5.6.x before 5.6.13 and ext/zip/ext_zip.cpp in HHVM before 3.12.1 allows remote attackers to create arbitrary empty directories via a crafted ZIP archive.
- Vulnerability: CVE-2015-2331
  - CVSS Score: 7.5
  - Description: Integer overflow in the _zip_cdir_new function in zip_dirent.c in libzip 0.11.2 and earlier, as used in the ZIP extension in PHP before 5.4.39, 5.5.x before 5.5.23, and 5.6.x before 5.6.7 and other products, allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a ZIP archive that contains many entries, leading to a heap-based buffer overflow.
- Vulnerability: CVE-2013-1896
  - CVSS Score: 4.3
  - Description: mod_dav.c in the Apache HTTP Server before 2.2.25 does not properly determine whether DAV is enabled for a URI, which allows remote attackers to cause a denial of service (segmentation fault) via a MERGE request in which the URI is configured for handling by the mod_dav_svn module, but a certain href attribute in XML data refers to a non-DAV URI.
- Vulnerability: CVE-2011-3336
  - CVSS Score: 7.8
  - Description: regcomp in the BSD implementation of libc is vulnerable to denial of service due to stack exhaustion.

- Vulnerability: CVE-2012-2336
  - CVSS Score: 5
  - Description: sapi/cgi/cgi_main.c in PHP before 5.3.13 and 5.4.x before 5.4.3, when configured as a CGI script (aka php-cgi), does not properly handle query strings that lack an = (equals sign) character, which allows remote attackers to cause a denial of service (resource consumption) by placing command-line options in the query string, related to lack of skipping a certain php_getopt for the 'T' case. NOTE: this vulnerability exists because of an incomplete fix for CVE-2012-1823.
- Vulnerability: CVE-2016-4538
  - CVSS Score: 7.5
  - Description: The bcpowmod function in ext/bcmath/bcmath.c in PHP before 5.5.35, 5.6.x before 5.6.21, and 7.x before 7.0.6 modifies certain data structures without considering whether they are copies of the _zero_, _one_, or _two_ global variable, which allows remote attackers to cause a denial of service or possibly have unspecified other impact via a crafted call.
- Vulnerability: CVE-2016-4539
  - CVSS Score: 7.5
  - Description: The xml_parse_into_struct function in ext/xml/xml.c in PHP before 5.5.35, 5.6.x before 5.6.21, and 7.x before 7.0.6 allows remote attackers to cause a denial of service (buffer under-read and segmentation fault) or possibly have unspecified other impact via crafted XML data in the second argument, leading to a parser level of zero.
- Vulnerability: CVE-2015-3329
  - CVSS Score: 7.5
  - Description: Multiple stack-based buffer overflows in the phar_set_inode function in phar_internal.h in PHP before 5.4.40, 5.5.x before 5.5.24, and 5.6.x before 5.6.8 allow remote attackers to execute arbitrary code via a crafted length value in a (1) tar, (2) phar, or (3) ZIP archive.
- Vulnerability: CVE-2020-11579
  - CVSS Score: 5
  - Description: An issue was discovered in Chadha PHPKB 9.0 Enterprise Edition. installer/test-connection.php (part of the installation process) allows a remote unauthenticated attacker to disclose local files on hosts running PHP before 7.2.16, or on hosts where the MySQL ALLOW LOCAL DATA INFILE option is enabled.
- Vulnerability: CVE-2015-4148
  - CVSS Score: 5
  - Description: The do_soap_call function in ext/soap/soap.c in PHP before 5.4.39, 5.5.x before 5.5.23, and 5.6.x before 5.6.7 does not verify that the uri property is a string, which allows remote attackers to obtain sensitive information by providing crafted serialized data with an int data type, related to a "type confusion" issue.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5

  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2016-6288
  - CVSS Score: 7.5
  - Description: The php_url_parse_ex function in ext/standard/url.c in PHP before 5.5.38 allows remote attackers to cause a denial of service (buffer over-read) or possibly have unspecified other impact via vectors involving the smart_str data type.

- Vulnerability: CVE-2016-9935
  - CVSS Score: 7.5
  - Description: The php_wddx_push_element function in ext/wddx/wddx.c in PHP before 5.6.29 and 7.x before 7.0.14 allows remote attackers to cause a denial of service (out-of-bounds read and memory corruption) or possibly have unspecified other impact via an empty boolean element in a wddxPacket XML document.

- Vulnerability: CVE-2016-5114
  - CVSS Score: 6.4
  - Description: sapi/fpm/fpm/fpm_log.c in PHP before 5.5.31, 5.6.x before 5.6.17, and 7.x before 7.0.2 misinterprets the semantics of the snprintf return value, which allows attackers to obtain sensitive information from process memory or cause a denial of service (out-of-bounds read and buffer overflow) via a long string, as demonstrated by a long URI in a configuration with custom REQUEST_URI logging.

- Vulnerability: CVE-2012-3499
  - CVSS Score: 4.3
  - Description: Multiple cross-site scripting (XSS) vulnerabilities in the Apache HTTP Server 2.2.x before 2.2.24-dev and 2.4.x before 2.4.4 allow remote attackers to inject arbitrary web script or HTML via vectors involving hostnames and URIs in the (1) mod_imagemap, (2) mod_info, (3) mod_ldap, (4) mod_proxy_ftp, and (5) mod_status modules.

- Vulnerability: CVE-2010-4657
  - CVSS Score: 5
  - Description: PHP5 before 5.4.4 allows passing invalid utf-8 strings via the xmlTextWriterWriteAttribute, which are then misparsed by libxml2. This results in memory leak into the resulting output.

- Vulnerability: CVE-2016-9934
  - CVSS Score: 5
  - Description: ext/wddx/wddx.c in PHP before 5.6.28 and 7.x before 7.0.13 allows remote attackers to cause a denial of service (NULL pointer dereference) via crafted serialized data in a wddxPacket XML document, as demonstrated by a PDORow string.

- Vulnerability: CVE-2008-0455
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_negotiation module in the Apache HTTP Server 2.2.6 and earlier in the 2.2.x series, 2.0.61 and earlier in the 2.0.x series, and 1.3.39 and earlier in the 1.3.x series allows remote authenticated users to inject arbitrary web script or HTML by uploading a file with a name containing XSS sequences and a file extension, which leads to injection within a (1) "406 Not Acceptable" or (2) "300 Multiple Choices" HTTP response when the extension is omitted in a request for the file.
- Vulnerability: CVE-2018-19395
  - CVSS Score: 5
  - Description: ext/standard/var.c in PHP 5.x through 7.1.24 on Windows allows attackers to cause a denial of service (NULL pointer dereference and application crash) because com and com_safearray_proxy return NULL in com_properties_get in ext/com_dotnet/com_handlers.c, as demonstrated by a serialize call on COM("WScript.Shell").
- Vulnerability: CVE-2014-3668
  - CVSS Score: 5
  - Description: Buffer overflow in the date_from_ISO8601 function in the mkgmtime implementation in libxmlrpc/xmlrpc.c in the XMLRPC extension in PHP before 5.4.34, 5.5.x before 5.5.18, and 5.6.x before 5.6.2 allows remote attackers to cause a denial of service (application crash) via (1) a crafted first argument to the xmlrpc_set_type function or (2) a crafted argument to the xmlrpc_decode function, related to an out-of-bounds read operation.
- Vulnerability: CVE-2015-4644
  - CVSS Score: 5
  - Description: The php_pgsql_meta_data function in pgsql.c in the PostgreSQL (aka pgsql) extension in PHP before 5.4.42, 5.5.x before 5.5.26, and 5.6.x before 5.6.10 does not validate token extraction for table names, which might allow remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a crafted name. NOTE: this vulnerability exists because of an incomplete fix for CVE-2015-1352.
- Vulnerability: CVE-2017-11142
  - CVSS Score: 7.8
  - Description: In PHP before 5.6.31, 7.x before 7.0.17, and 7.1.x before 7.1.3, remote attackers could cause a CPU consumption denial of service attack by injecting long form variables, related to main/php_variables.c.
- Vulnerability: CVE-2012-2386
  - CVSS Score: 7.5
  - Description: Integer overflow in the phar_parse_tarfile function in tar.c in the phar extension in PHP before 5.3.14 and 5.4.x before 5.4.4 allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a crafted tar file that triggers a heap-based buffer overflow.
- Vulnerability: CVE-2016-4343

  - CVSS Score: 6.8
  - Description: The phar_make_dirstream function in ext/phar/dirstream.c in PHP before 5.6.18 and 7.x before 7.0.3 mishandles zero-size ./.@LongLink files, which allows remote attackers to cause a denial of service (uninitialized pointer dereference) or possibly have unspecified other impact via a crafted TAR archive.

- Vulnerability: CVE-2016-4342
  - CVSS Score: 8.3
  - Description: ext/phar/phar_object.c in PHP before 5.5.32, 5.6.x before 5.6.18, and 7.x before 7.0.3 mishandles zero-length uncompressed data, which allows remote attackers to cause a denial of service (heap memory corruption) or possibly have unspecified other impact via a crafted (1) TAR, (2) ZIP, or (3) PHAR archive.
- Vulnerability: CVE-2012-2376
  - CVSS Score: 10
  - Description: Buffer overflow in the com_print_typeinfo function in PHP 5.4.3 and earlier on Windows allows remote attackers to execute arbitrary code via crafted arguments that trigger incorrect handling of COM object VARIANT types, as exploited in the wild in May 2012.
- Vulnerability: CVE-2016-6289
  - CVSS Score: 6.8
  - Description: Integer overflow in the virtual_file_ex function in TSRM/tsrm_virtual_cwd.c in PHP before 5.5.38, 5.6.x before 5.6.24, and 7.x before 7.0.9 allows remote attackers to cause a denial of service (stack-based buffer overflow) or possibly have unspecified other impact via a crafted extract operation on a ZIP archive.
- Vulnerability: CVE-2016-4537
  - CVSS Score: 7.5
  - Description: The bcpowmod function in ext/bcmath/bcmath.c in PHP before 5.5.35, 5.6.x before 5.6.21, and 7.x before 7.0.6 accepts a negative integer for the scale argument, which allows remote attackers to cause a denial of service or possibly have unspecified other impact via a crafted call.
- Vulnerability: CVE-2015-7803
  - CVSS Score: 6.8
  - Description: The phar_get_entry_data function in ext/phar/util.c in PHP before 5.5.30 and 5.6.x before 5.6.14 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a .phar file with a crafted TAR archive entry in which the Link indicator references a file that does not exist.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2016-9933
  - CVSS Score: 5

  - Description: Stack consumption vulnerability in the gdImageFillToBorder function in gd.c in the GD Graphics Library (aka libgd) before 2.2.2, as used in PHP before 5.6.28 and 7.x before 7.0.13, allows remote attackers to cause a denial of service (segmentation violation) via a crafted imagefilltoborder call that triggers use of a negative color value.

- Vulnerability: CVE-2015-7804
  - CVSS Score: 6.8
  - Description: Off-by-one error in the phar_parse_zipfile function in ext/phar/zip.c in PHP before 5.5.30 and 5.6.x before 5.6.14 allows remote attackers to cause a denial of service (uninitialized pointer dereference and application crash) by including the / filename in a .zip PHAR archive.
- Vulnerability: CVE-2014-3479
  - CVSS Score: 4.3
  - Description: The cdf_check_stream_offset function in cdf.c in file before 5.19, as used in the Fileinfo component in PHP before 5.4.30 and 5.5.x before 5.5.14, relies on incorrect sector-size data, which allows remote attackers to cause a denial of service (application crash) via a crafted stream offset in a CDF file.
- Vulnerability: CVE-2016-8612
  - CVSS Score: 3.3
  - Description: Apache HTTP Server mod_cluster before version httpd 2.4.23 is vulnerable to an Improper Input Validation in the protocol parsing logic in the load balancer resulting in a Segmentation Fault in the serving httpd process.
- Vulnerability: CVE-2014-8142
  - CVSS Score: 7.5
  - Description: Use-after-free vulnerability in the process_nested_data function in ext/standard/var_unserializer.re in PHP before 5.4.36, 5.5.x before 5.5.20, and 5.6.x before 5.6.4 allows remote attackers to execute arbitrary code via a crafted unserialize call that leverages improper handling of duplicate keys within the serialized properties of an object, a different vulnerability than CVE-2004-1019.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2022-30556
  - CVSS Score: 5

  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.
- Vulnerability: CVE-2015-3330
  - CVSS Score: 6.8
  - Description: The php_handler function in sapi/apache2handler/sapi_apache2.c in PHP before 5.4.40, 5.5.x before 5.5.24, and 5.6.x before 5.6.8, when the Apache HTTP Server 2.4.x is used, allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via pipelined HTTP requests that result in a "deconfigured interpreter."
- Vulnerability: CVE-2017-16642
  - CVSS Score: 5
  - Description: In PHP before 5.6.32, 7.x before 7.0.25, and 7.1.x before 7.1.11, an error in the date extension's timelib_meridian handling of 'front of' and 'back of' directives could be used by attackers able to supply date strings to leak information from the interpreter, related to ext/date/lib/parse_date.c out-of-bounds reads affecting the php_parse_date function. NOTE: this is a different issue than CVE-2017-11145.
- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.
- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

11.122 IP Address: 90.147.167.18

- Organization: GARR CSD - Catania
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: nginx
  - Port: 80
  - Version: 1.22.1
  - Location: https://90.147.167.18/

No vulnerabilities found for this IP address.

11.123 IP Address: 159.149.145.216

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.9p1 Ubuntu-3ubuntu0.10
  - Location:
- Service: N/A
  - Port: 80
  - Version: N/A
  - Location: https://159.149.145.216/

No vulnerabilities found for this IP address.

11.124 IP Address: 2606:4700::6812:b1d

- Organization: Cloudflare, Inc.
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 1
- Medium Vulnerabilities: 7
- Low Vulnerabilities: 0
- Total Vulnerabilities: 8

Services Running on IP Address

- Service: N/A
  - Port: 443
  - Version: N/A
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2022-31628
  - CVSS Score: N/A
  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the phar uncompressor code would recursively uncompress "quines" gzip files, resulting in an infinite loop.
- Vulnerability: CVE-2022-31629
  - CVSS Score: N/A
  - Description: In PHP versions before 7.4.31, 8.0.24 and 8.1.11, the vulnerability enables network and same-site attackers to set a standard insecure cookie in the victim's browser which is treated as a '__Host-' or '__Secure-' cookie by PHP applications.
- Vulnerability: CVE-2022-31626
  - CVSS Score: 6
  - Description: In PHP versions 7.4.x below 7.4.30, 8.0.x below 8.0.20, and 8.1.x below 8.1.7, when pdo_mysql extension with mysqlnd driver, if the third party is allowed to supply host to connect to and the password for the connection, password of excessive length can trigger a buffer overflow in PHP, which can lead to a remote code execution vulnerability.
- Vulnerability: CVE-2020-11023
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.0.3 and before 3.5.0, passing HTML containing <option> elements from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.
- Vulnerability: CVE-2022-31625
  - CVSS Score: 6.8

  - Description: In PHP versions 7.4.x below 7.4.30, 8.0.x below 8.0.20, and 8.1.x below 8.1.7, when using Postgres database extension, supplying invalid parameters to the parametrized query may lead to PHP attempting to free memory using uninitialized data as pointers. This could lead to RCE vulnerability or denial of service.

- Vulnerability: CVE-2017-9118
  - CVSS Score: 5
  - Description: PHP 7.1.5 has an Out of bounds access in php_pcre_replace_impl via a crafted preg_replace call.

- Vulnerability: CVE-2022-31630
  - CVSS Score: N/A
  - Description: In PHP versions prior to 7.4.33, 8.0.25 and 8.1.12, when using imageloadfont() function in gd extension, it is possible to supply a specially crafted font file, such as if the loaded font is used with imagechar() function, the read outside allocated buffer will be used. This can lead to crashes or disclosure of confidential information.

- Vulnerability: CVE-2022-37454
  - CVSS Score: N/A
  - Description: The Keccak XKCP SHA-3 reference implementation before fdc6fef has an integer overflow and resultant buffer overflow that allows attackers to execute arbitrary code or eliminate expected cryptographic properties. This occurs in the sponge function interface.

- Vulnerability: CVE-2024-4577
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, when using Apache and PHP-CGI on Windows, if the system is set up to use certain code pages, Windows may use "Best-Fit" behavior to replace characters in command line given toWin32 API functions. PHP CGI module may misinterpret those characters as PHP options, which may allow a malicious user to pass options to PHP binary being run, and thus reveal the source code of scripts, run arbitrary PHP code on the server, etc.

- Vulnerability: CVE-2020-11022
  - CVSS Score: 4.3
  - Description: In jQuery versions greater than or equal to 1.2 and before 3.5.0, passing HTML from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.

- Vulnerability: CVE-2013-2220
  - CVSS Score: 7.5
  - Description: Buffer overflow in the radius_get_vendor_attr function in the Radius extension before 1.2.7 for PHP allows remote attackers to cause a denial of service (crash) and possibly execute arbitrary code via a large Vendor Specific Attributes (VSA) length value.

- Vulnerability: CVE-2021-21708
  - CVSS Score: 6.8

  - Description: In PHP versions 7.4.x below 7.4.28, 8.0.x below 8.0.16, and 8.1.x below 8.1.3, when using filter functions with FILTER_VALIDATE_FLOAT filter and min/max limits, if the filter fails, there is a possibility to trigger use of allocated memory after free, which can result it crashes, and potentially in overwrite of other memory chunks and RCE. This issue affects: code that uses FILTER_VALIDATE_FLOAT with min/max limits.

- Vulnerability: CVE-2007-3205
  - CVSS Score: 5
  - Description: The parse_str function in (1) PHP, (2) Hardened-PHP, and (3) Suhosin, when called without a second parameter, might allow remote attackers to overwrite arbitrary variables by specifying variable names and values in the string to be parsed. NOTE: it is not clear whether this is a design limitation of the function or a bug in PHP, although it is likely to be regarded as a bug in Hardened-PHP and Suhosin.

- Vulnerability: CVE-2024-5458
  - CVSS Score: N/A
  - Description: In PHP versions8.1.* before 8.1.29, 8.2.* before 8.2.20, 8.3.* before 8.3.8, due to a code logic error, filtering functions such as filter_var when validating URLs(FILTER_VALIDATE_URL) for certain types of URLs the function will result in invalid user information (username + password part of URLs) being treated as valid user information. This may lead to the downstream code accepting invalid URLs as valid and parsing them incorrectly.

11.125 IP Address: 159.149.145.130

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 1
- High Vulnerabilities: 0
- Medium Vulnerabilities: 3
- Low Vulnerabilities: 0
- Total Vulnerabilities: 4

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.9p1 Ubuntu-3ubuntu0.10
  - Location:
- Service: N/A
  - Port: 80
  - Version: N/A
  - Location: https://159.149.145.130/
- Service: nginx
  - Port: 443
  - Version: 1.19.0
  - Location: /
- Service: OpenSSH
  - Port: 2222
  - Version: 9.3
  - Location:

Vulnerabilities Found

- Vulnerability: CVE-2023-44487
  - CVSS Score: N/A
  - Description: The HTTP/2 protocol allows a denial of service (server resource consumption) because request cancellation can reset many streams quickly, as exploited in the wild in August through October 2023.
- Vulnerability: CVE-2021-23017
  - CVSS Score: 6.8
  - Description: A security issue in nginx resolver was identified, which might allow an attacker who is able to forge UDP packets from the DNS server to cause 1-byte memory overwrite, resulting in worker process crash or potential other impact.
- Vulnerability: CVE-2021-3618
  - CVSS Score: 5.8

  - Description: ALPACA is an application layer protocol content confusion attack, exploiting TLS servers implementing different protocols but using compatible certificates, such as multi-domain or wildcard certificates. A MiTM attacker having access to victim's traffic at the TCP/IP layer can redirect traffic from one subdomain to another, resulting in a valid TLS session. This breaks the authentication of TLS and cross-protocol attacks may be possible where the behavior of one protocol service may compromise the other at the application layer.

- Vulnerability: CVE-2008-3844
  - CVSS Score: 9.3
  - Description: Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact. NOTE: since the malicious packages were not distributed from any official Red Hat sources, the scope of this issue is restricted to users who may have obtained these packages through unofficial distribution points. As of 20080827, no unofficial distributions of this software are known.

- Vulnerability: CVE-2023-51767
  - CVSS Score: N/A
  - Description: OpenSSH through 9.6, when common types of DRAM are used, might allow row hammer attacks (for authentication bypass) because the integer value of authenticated in mm_answer_authpassword does not resist flips of a single bit. NOTE: this is applicable to a certain threat model of attacker-victim co-location in which the attacker has user privileges.

- Vulnerability: CVE-2023-48795
  - CVSS Score: N/A

  - Description: The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, aka a Terrapin attack. This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and mishandles use of sequence numbers. For example, there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC). The bypass occurs in chacha20-poly1305@openssh.com and (if CBC is used) the -etm@openssh.com MAC algorithms. This also affects Maverick Synergy Java SSH API before 3.1.0-SNAPSHOT, Dropbear through 2022.83, Ssh before 5.1.1 in Erlang/OTP, PuTTY before 0.80, AsyncSSH before 2.14.2, golang.org/x/crypto before 0.17.0, libssh before 0.10.6, libssh2 through 1.11.0, Thorn Tech SFTP Gateway before 3.4.6, Tera Term before 5.1, Paramiko before 3.4.0, jsch before 0.2.15, SFTPGo before 2.5.6, Netgate pfSense Plus through 23.09.1, Netgate pfSense CE through 2.7.2, HPN-SSH through 18.2.0, ProFTPD before 1.3.8b (and before 1.3.9rc2), ORYX CycloneSSH before 2.3.4, NetSarang XShell 7 before Build 0144, CrushFTP before 10.6.0, ConnectBot SSH library before 2.2.22, Apache MINA sshd through 2.11.0, sshj through 0.37.0, TinySSH through 20230101, trilead-ssh2 6401, LANCOM LCOS and LANconfig, FileZilla before 3.66.4, Nova before 11.8, PKIX-SSH before 14.4, SecureCRT before 9.4.3, Transmit5 before 5.10.4, Win32-OpenSSH before 9.5.0.0p1-Beta, WinSCP before 6.2.2, Bitvise SSH Server before 9.32, Bitvise SSH Client before 9.33, KiTTY through 0.76.1.13, the net-ssh gem 7.2.0 for Ruby, the mscdex ssh2 module before 1.15.0 for Node.js, the thrussh library before 0.35.1 for Rust, and the Russh crate before 0.40.2 for Rust.

- Vulnerability: CVE-2023-38408
  - CVSS Score: N/A
  - Description: The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.) NOTE: this issue exists because of an incomplete fix for CVE-2016-10009.
- Vulnerability: CVE-2007-2768
  - CVSS Score: 4.3
  - Description: OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.
- Vulnerability: CVE-2023-51384
  - CVSS Score: N/A
  - Description: In ssh-agent in OpenSSH before 9.6, certain destination constraints can be incompletely applied. When destination constraints are specified during addition of PKCS#11-hosted private keys, these constraints are only applied to the first key, even if a PKCS#11 token returns multiple keys.
- Vulnerability: CVE-2023-51385
  - CVSS Score: N/A

  - Description: In ssh in OpenSSH before 9.6, OS command injection might occur if a user name or host name has shell metacharacters, and this name is referenced by an expansion token in certain situations. For example, an untrusted Git repository can have a submodule with shell metacharacters in a user name or host name.

- Vulnerability: CVE-2024-6387
  - CVSS Score: N/A
  - Description: A security regression (CVE-2006-5051) was discovered in OpenSSH's server (sshd). There is a race condition which can lead sshd to handle some signals in an unsafe manner. An unauthenticated, remote attacker may be able to trigger it by failing to authenticate within a set time period.

11.126 IP Address: 159.149.30.17

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 20
- Medium Vulnerabilities: 66
- Low Vulnerabilities: 6
- Total Vulnerabilities: 92

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: 2.4.41
  - Location: https://prenotazioni.mat.unimi.it/
- Service: Apache httpd
  - Port: 443
  - Version: 2.4.41
  - Location: /

Vulnerabilities Found

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.
- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2020-35452

  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow

- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.

- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.

- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.

- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling

- Vulnerability: CVE-2021-30641
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.39 to 2.4.46 Unexpected matching behavior with 'MergeSlashes OFF'

- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.

- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3

  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.

- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.

- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.

- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.

- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A
  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.
- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.
- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.
- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.
- Vulnerability: CVE-2019-17567
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.
- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.
- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.
- Vulnerability: CVE-2012-4001
  - CVSS Score: 5

  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).

- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.

- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.

- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5

  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.

- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.

- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.

- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.
- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942

  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service

- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow

- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.

- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.

- Vulnerability: CVE-2022-28614
  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows

- Vulnerability: CVE-2009-2299

  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2020-13950
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.41 to 2.4.46 mod_proxy_http can be made to crash (NULL pointer dereference) with specially crafted requests using both Content-Length and Transfer-Encoding headers, leading to a Denial of Service

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2024-27316
  - CVSS Score: N/A
  - Description: HTTP/2 incoming headers exceeding the limit are temporarily buffered in nghttp2 in order to generate an informative HTTP 413 response. If a client does not stop sending headers, this leads to memory exhaustion.

- Vulnerability: CVE-2013-2765
  - CVSS Score: 5
  - Description: The ModSecurity module before 2.7.4 for the Apache HTTP Server allows remote attackers to cause a denial of service (NULL pointer dereference, process crash, and disk consumption) via a POST request with a large body and a crafted Content-Type header.
- Vulnerability: CVE-2020-1934
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, mod_proxy_ftp may use uninitialized memory when proxying to a malicious FTP server.
- Vulnerability: CVE-2022-36760
  - CVSS Score: N/A
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.54 and prior versions.
- Vulnerability: CVE-2020-35452
  - CVSS Score: 6.8
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Digest nonce can cause a stack overflow in mod_auth_digest. There is no report of this overflow being exploitable, nor the Apache HTTP Server team could create one, though some particular compiler and/or compilation option might make it possible, with limited consequences anyway due to the size (a single byte) and the value (zero byte) of the overflow
- Vulnerability: CVE-2022-29404
  - CVSS Score: 5
  - Description: In Apache HTTP Server 2.4.53 and earlier, a malicious request to a lua script that calls r:parsebody(0) may cause a denial of service due to no default limit on possible input size.
- Vulnerability: CVE-2023-27522
  - CVSS Score: N/A
  - Description: HTTP Response Smuggling vulnerability in Apache HTTP Server via mod_proxy_uwsgi. This issue affects Apache HTTP Server: from 2.4.30 through 2.4.55.Special characters in the origin response header can truncate/split the response forwarded to the client.
- Vulnerability: CVE-2009-0796
  - CVSS Score: 2.6
  - Description: Cross-site scripting (XSS) vulnerability in Status.pm in Apache::Status and Apache2::Status in mod_perl1 and mod_perl2 for the Apache HTTP Server, when /perl-status is accessible, allows remote attackers to inject arbitrary web script or HTML via the URI.
- Vulnerability: CVE-2013-4365
  - CVSS Score: 7.5
  - Description: Heap-based buffer overflow in the fcgid_header_bucket_read function in fcgid_bucket.c in the mod_fcgid module before 2.3.9 for the Apache HTTP Server allows remote attackers to have an unspecified impact via unknown vectors.

- Vulnerability: CVE-2022-22720
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.52 and earlier fails to close inbound connection when errors are encountered discarding the request body, exposing the server to HTTP Request Smuggling
- Vulnerability: CVE-2021-30641
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.39 to 2.4.46 Unexpected matching behavior with 'MergeSlashes OFF'
- Vulnerability: CVE-2022-28330
  - CVSS Score: 5
  - Description: Apache HTTP Server 2.4.53 and earlier on Windows may read beyond bounds when configured to process requests with the mod_isapi module.
- Vulnerability: CVE-2020-11993
  - CVSS Score: 4.3
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43 When trace/debug was enabled for the HTTP/2 module and on certain traffic edge patterns, logging statements were made on the wrong connection, causing concurrent use of memory pools. Configuring the LogLevel of mod_http2 above "info" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-32791
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, the AES GCM encryption in mod_auth_openidc uses a static IV and AAD. It is important to fix because this creates a static nonce and since aes-gcm is a stream cipher, this can lead to known cryptographic issues, since the same key is being reused. From 2.4.9 onwards this has been patched to use dynamic values through usage of cjose AES encryption routines.
- Vulnerability: CVE-2021-32792
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In mod_auth_openidc before version 2.4.9, there is an XSS vulnerability in when using ‘OIDCPreservePost On‘.
- Vulnerability: CVE-2023-31122
  - CVSS Score: N/A
  - Description: Out-of-bounds Read vulnerability in mod_macro of Apache HTTP Server.This issue affects Apache HTTP Server: through 2.4.57.
- Vulnerability: CVE-2024-38476
  - CVSS Score: N/A

  - Description: Vulnerability in core of Apache HTTP Server 2.4.59 and earlier are vulnerably to information disclosure, SSRF or local script execution viabackend applications whose response headers are malicious or exploitable.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38477
  - CVSS Score: N/A
  - Description: null pointer dereference in mod_proxy in Apache HTTP Server 2.4.59 and earlier allows an attacker to crash the server via a malicious request.Users are recommended to upgrade to version 2.4.60, which fixes this issue.

- Vulnerability: CVE-2024-38474
  - CVSS Score: N/A
  - Description: Substitution encoding issue in mod_rewrite in Apache HTTP Server 2.4.59 and earlier allows attacker to execute scripts indirectories permitted by the configuration but not directly reachable by anyURL or source disclosure of scripts meant to only to be executed as CGI.Users are recommended to upgrade to version 2.4.60, which fixes this issue.Some RewriteRules that capture and substitute unsafely will now fail unless rewrite flag "UnsafeAllow3F" is specified.

- Vulnerability: CVE-2022-22721
  - CVSS Score: 5.8
  - Description: If LimitXMLRequestBody is set to allow request bodies larger than 350MB (defaults to 1M) on 32 bit systems an integer overflow happens which later causes out of bounds writes. This issue affects Apache HTTP Server 2.4.52 and earlier.

- Vulnerability: CVE-2006-20001
  - CVSS Score: N/A
  - Description: A carefully crafted If: request header can cause a memory read, or write of a single zero byte, in a pool (heap) memory location beyond the header value sent. This could cause the process to crash.This issue affects Apache HTTP Server 2.4.54 and earlier.

- Vulnerability: CVE-2021-33193
  - CVSS Score: 5
  - Description: A crafted method sent through HTTP/2 will bypass validation and be forwarded by mod_proxy, which can lead to request splitting or cache poisoning. This issue affects Apache HTTP Server 2.4.17 to 2.4.48.

- Vulnerability: CVE-2013-0941
  - CVSS Score: 2.1
  - Description: EMC RSA Authentication API before 8.1 SP1, RSA Web Agent before 5.3.5 for Apache Web Server, RSA Web Agent before 5.3.5 for IIS, RSA PAM Agent before 7.0, and RSA Agent before 6.1.4 for Microsoft Windows use an improper encryption algorithm and a weak key for maintaining the stored data of the node secret for the SecurID Authentication API, which allows local users to obtain sensitive information via cryptographic attacks on this data.

- Vulnerability: CVE-2019-17567
  - CVSS Score: 5

  - Description: Apache HTTP Server versions 2.4.6 to 2.4.46 mod_proxy_wstunnel configured on an URL that is not necessarily Upgraded by the origin server was tunneling the whole connection regardless, thus allowing for subsequent requests on the same connection to pass through with no HTTP validation, authentication or authorization possibly configured.

- Vulnerability: CVE-2012-3526
  - CVSS Score: 5
  - Description: The reverse proxy add forward module (mod_rpaf) 0.5 and 0.6 for the Apache HTTP Server allows remote attackers to cause a denial of service (server or application crash) via multiple X-Forwarded-For headers in a request.

- Vulnerability: CVE-2022-31813
  - CVSS Score: 7.5
  - Description: Apache HTTP Server 2.4.53 and earlier may not send the X-Forwarded-* headers to the origin server based on client side Connection header hop-by-hop mechanism. This may be used to bypass IP based authentication on the origin server/application.

- Vulnerability: CVE-2012-4001
  - CVSS Score: 5
  - Description: The mod_pagespeed module before 0.10.22.6 for the Apache HTTP Server does not properly verify its host name, which allows remote attackers to trigger HTTP requests to arbitrary hosts via unspecified vectors, as demonstrated by requests to intranet servers.

- Vulnerability: CVE-2022-37436
  - CVSS Score: N/A
  - Description: Prior to Apache HTTP Server 2.4.55, a malicious backend can cause the response headers to be truncated early, resulting in some headers being incorporated into the response body. If the later headers have any security purpose, they will not be interpreted by the client.

- Vulnerability: CVE-2012-4360
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in the mod_pagespeed module 0.10.19.1 through 0.10.22.4 for the Apache HTTP Server allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.

- Vulnerability: CVE-2021-40438
  - CVSS Score: 6.8
  - Description: A crafted request uri-path can cause mod_proxy to forward the request to an origin server choosen by the remote user. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2011-1176
  - CVSS Score: 4.3
  - Description: The configuration merger in itk.c in the Steinar H. Gunderson mpm-itk Multi-Processing Module 2.2.11-01 and 2.2.11-02 for the Apache HTTP Server does not properly handle certain configuration sections that specify NiceValue but not AssignUserID, which might allow remote attackers to gain privileges by leveraging the root uid and root gid of an mpm-itk process.

- Vulnerability: CVE-2021-36160
  - CVSS Score: 5
  - Description: A carefully crafted request uri-path can cause mod_proxy_uwsgi to read above the allocated memory and crash (DoS). This issue affects Apache HTTP Server versions 2.4.30 to 2.4.48 (inclusive).
- Vulnerability: CVE-2022-23943
  - CVSS Score: 7.5
  - Description: Out-of-bounds Write vulnerability in mod_sed of Apache HTTP Server allows an attacker to overwrite heap memory with possibly attacker provided data. This issue affects Apache HTTP Server 2.4 version 2.4.52 and prior versions.
- Vulnerability: CVE-2020-1927
  - CVSS Score: 5.8
  - Description: In Apache HTTP Server 2.4.0 to 2.4.41, redirects configured with mod_rewrite that were intended to be self-referential might be fooled by encoded newlines and redirect instead to an an unexpected URL within the request URL.
- Vulnerability: CVE-2011-2688
  - CVSS Score: 7.5
  - Description: SQL injection vulnerability in mysql/mysql-auth.pl in the mod_authnz_external module 3.2.5 and earlier for the Apache HTTP Server allows remote attackers to execute arbitrary SQL commands via the user field.
- Vulnerability: CVE-2021-34798
  - CVSS Score: 5
  - Description: Malformed requests may cause the server to dereference a NULL pointer. This issue affects Apache HTTP Server 2.4.48 and earlier.
- Vulnerability: CVE-2023-25690
  - CVSS Score: N/A
  - Description: Some mod_proxy configurations on Apache HTTP Server versions 2.4.0 through 2.4.55 allow a HTTP Request Smuggling attack.Configurations are affected when mod_proxy is enabled along with some form of RewriteRule or ProxyPassMatch in which a non-specific pattern matches some portion of the user-supplied request-target (URL) data and is then re-inserted into the proxied request-target using variable substitution. For example, something like:RewriteEngine onRewriteRule "^/here/(.*)" "http://example.com:8080/elsewhere?$1"; [P]ProxyPassReverse /here/ http://example.com:8080/Request splitting/smuggling could result in bypass of access controls in the proxy server, proxying unintended URLs to existing origin servers, and cache poisoning. Users are recommended to update to at least version 2.4.56 of Apache HTTP Server.
- Vulnerability: CVE-2021-32786
  - CVSS Score: 5.8

  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. In versions prior to 2.4.9, ‘oidc_validate_redirect_url()‘ does not parse URLs the same way as most browsers do. As a result, this function can be bypassed and leads to an Open Redirect vulnerability in the logout functionality. This bug has been fixed in version 2.4.9 by replacing any backslash of the URL to redirect with slashes to address a particular breaking change between the different specifications (RFC2396 / RFC3986 and WHATWG). As a workaround, this vulnerability can be mitigated by configuring ‘mod_auth_openidc‘ to only allow redirection whose destination matches a given regular expression.

- Vulnerability: CVE-2021-32785
  - CVSS Score: 4.3
  - Description: mod_auth_openidc is an authentication/authorization module for the Apache 2.x HTTP server that functions as an OpenID Connect Relying Party, authenticating users against an OpenID Connect Provider. When mod_auth_openidc versions prior to 2.4.9 are configured to use an unencrypted Redis cache (‘OIDCCacheEncrypt off‘, ‘OIDCSessionType server-cache‘, ‘OIDCCacheType redis‘), ‘mod_auth_openidc‘ wrongly performed argument interpolation before passing Redis requests to ‘hiredis‘, which would perform it again and lead to an uncontrolled format string bug. Initial assessment shows that this bug does not appear to allow gaining arbitrary code execution, but can reliably provoke a denial of service by repeatedly crashing the Apache workers. This bug has been corrected in version 2.4.9 by performing argument interpolation only once, using the ‘hiredis‘ API. As a workaround, this vulnerability can be mitigated by setting ‘OIDCCacheEncrypt‘ to ‘on‘, as cache keys are cryptographically hashed before use when this option is enabled.
- Vulnerability: CVE-2020-9490
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.20 to 2.4.43. A specially crafted value for the ’Cache-Digest’ header in a HTTP/2 request would result in a crash when the server actually tries to HTTP/2 PUSH a resource afterwards. Configuring the HTTP/2 feature via "H2Push off" will mitigate this vulnerability for unpatched servers.
- Vulnerability: CVE-2021-44224
  - CVSS Score: 6.4
  - Description: A crafted URI sent to httpd configured as a forward proxy (ProxyRequests on) can cause a crash (NULL pointer dereference) or, for configurations mixing forward and reverse proxy declarations, can allow for requests to be directed to a declared Unix Domain Socket endpoint (Server Side Request Forgery). This issue affects Apache HTTP Server 2.4.7 up to 2.4.51 (included).
- Vulnerability: CVE-2007-4723
  - CVSS Score: 7.5
  - Description: Directory traversal vulnerability in Ragnarok Online Control Panel 4.3.4a, when the Apache HTTP Server is used, allows remote attackers to bypass authentication via directory traversal sequences in a URI that ends with the name of a publicly available page, as demonstrated by a "/...../" sequence and an account_manage.php/login.php final component for reaching the protected account_manage.php page.

- Vulnerability: CVE-2020-11984
  - CVSS Score: 7.5
  - Description: Apache HTTP server 2.4.32 to 2.4.44 mod_proxy_uwsgi info disclosure and possible RCE
- Vulnerability: CVE-2021-44790
  - CVSS Score: 7.5
  - Description: A carefully crafted request body can cause a buffer overflow in the mod_lua multipart parser (r:parsebody() called from Lua scripts). The Apache httpd team is not aware of an exploit for the vulnerabilty though it might be possible to craft one. This issue affects Apache HTTP Server 2.4.51 and earlier.
- Vulnerability: CVE-2013-0942
  - CVSS Score: 4.3
  - Description: Cross-site scripting (XSS) vulnerability in EMC RSA Authentication Agent 7.1 before 7.1.1 for Web for Internet Information Services, and 7.1 before 7.1.1 for Web for Apache, allows remote attackers to inject arbitrary web script or HTML via unspecified vectors.
- Vulnerability: CVE-2021-26690
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 A specially crafted Cookie header handled by mod_session can cause a NULL pointer dereference and crash, leading to a possible Denial Of Service
- Vulnerability: CVE-2021-26691
  - CVSS Score: 7.5
  - Description: In Apache HTTP Server versions 2.4.0 to 2.4.46 a specially crafted SessionHeader sent by an origin server could cause a heap overflow
- Vulnerability: CVE-2022-26377
  - CVSS Score: 5
  - Description: Inconsistent Interpretation of HTTP Requests ('HTTP Request Smuggling') vulnerability in mod_proxy_ajp of Apache HTTP Server allows an attacker to smuggle requests to the AJP server it forwards requests to. This issue affects Apache HTTP Server Apache HTTP Server 2.4 version 2.4.53 and prior versions.
- Vulnerability: CVE-2023-45802
  - CVSS Score: N/A
  - Description: When a HTTP/2 stream was reset (RST frame) by a client, there was a time window were the request's memory resources were not reclaimed immediately. Instead, de-allocation was deferred to connection close. A client could send new requests and resets, keeping the connection busy and open and causing the memory footprint to keep on growing. On connection close, all resources were reclaimed, but the process might run out of memory before that.This was found by the reporter during testing ofCVE-2023-44487 (HTTP/2 Rapid Reset Exploit) with their own test client. During "normal" HTTP/2 use, the probability to hit this bug is very low. The kept memory would not become noticeable before the connection closes or times out.Users are recommended to upgrade to version 2.4.58, which fixes the issue.
- Vulnerability: CVE-2022-28614

  - CVSS Score: 5
  - Description: The ap_rwrite() function in Apache HTTP Server 2.4.53 and earlier may read unintended memory if an attacker can cause the server to reflect very large input using ap_rwrite() or ap_rputs(), such as with mod_luas r:puts() function. Modules compiled and distributed separately from Apache HTTP Server that use the 'ap_rputs' function and may pass it a very large (INT_MAX or larger) string must be compiled against current headers to resolve the issue.

- Vulnerability: CVE-2020-13938
  - CVSS Score: 2.1
  - Description: Apache HTTP Server versions 2.4.0 to 2.4.46 Unprivileged local users can stop httpd on Windows

- Vulnerability: CVE-2009-2299
  - CVSS Score: 5
  - Description: The Artofdefence Hyperguard Web Application Firewall (WAF) module before 2.5.5-11635, 3.0 before 3.0.3-11636, and 3.1 before 3.1.1-11637, a module for the Apache HTTP Server, allows remote attackers to cause a denial of service (memory consumption) via an HTTP request with a large Content-Length value but no POST data.

- Vulnerability: CVE-2020-13950
  - CVSS Score: 5
  - Description: Apache HTTP Server versions 2.4.41 to 2.4.46 mod_proxy_http can be made to crash (NULL pointer dereference) with specially crafted requests using both Content-Length and Transfer-Encoding headers, leading to a Denial of Service

- Vulnerability: CVE-2024-40898
  - CVSS Score: N/A
  - Description: SSRF in Apache HTTP Server on Windows with mod_rewrite in server/vhost context, allows to potentially leak NTML hashes to a malicious server via SSRF and malicious requests.Users are recommended to upgrade to version 2.4.62 which fixes this issue.

- Vulnerability: CVE-2021-39275
  - CVSS Score: 7.5
  - Description: ap_escape_quotes() may write beyond the end of a buffer when given malicious input. No included modules pass untrusted data to these functions, but third-party / external modules may. This issue affects Apache HTTP Server 2.4.48 and earlier.

- Vulnerability: CVE-2022-28615
  - CVSS Score: 6.4
  - Description: Apache HTTP Server 2.4.53 and earlier may crash or disclose information due to a read beyond bounds in ap_strcmp_match() when provided with an extremely large input buffer. While no code distributed with the server can be coerced into such a call, third-party modules or lua scripts that use ap_strcmp_match() may hypothetically be affected.

- Vulnerability: CVE-2022-30556
  - CVSS Score: 5

  - Description: Apache HTTP Server 2.4.53 and earlier may return lengths to applications calling r:wsread() that point past the end of the storage allocated for the buffer.

- Vulnerability: CVE-2022-22719
  - CVSS Score: 5
  - Description: A carefully crafted request body can cause a read to a random memory area which could cause the process to crash. This issue affects Apache HTTP Server 2.4.52 and earlier.

11.127 IP Address: 159.149.53.144

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: Apache httpd
  - Port: 80
  - Version: N/A
  - Location: https://unimi.primo.exlibrisgroup.com/
- Service: Apache httpd
  - Port: 443
  - Version: N/A
  - Location: https://unimi.primo.exlibrisgroup.com/

No vulnerabilities found for this IP address.

11.128 IP Address: 159.149.145.228

- Organization: UNI-Milano
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: OpenSSH
  - Port: 22
  - Version: 8.2p1 Ubuntu-4ubuntu0.11
  - Location:

No vulnerabilities found for this IP address.

11.129 IP Address: 185.199.109.153

- Organization: GitHub, Inc.
- Operating System: N/A
- Critical Vulnerabilities: 0
- High Vulnerabilities: 0
- Medium Vulnerabilities: 0
- Low Vulnerabilities: 0
- Total Vulnerabilities: 0

Services Running on IP Address

- Service: N/A
  - Port: 80
  - Version: N/A
  - Location: /

No vulnerabilities found for this IP address.