Meta Last Check

Report generated by Nessus™ Fri, 02 Jun 2023 13:19:42 EDT

Important: This report has been edited by the pentester. Please check first page.

Important note: Please remind this report has been edited by the pentester, a full version of it as well is available from the pentester by request.

Please note especially how Remediation action worked properly in order to not let Nessus finding FIVE vulnerabilities, as requested.

Please also remind "scansione.info", a file containing all the "Informational Vulnerabilities", is available by request.

192.168.32.105

CRITICAL	HIGH	MEDIUM	LOW	INFO
7	5	25	2	125

Scan Information

Start time: Fri Jun 2 12:57:55 2023
End time: Fri Jun 2 13:19:42 2023

Host Information

Nethios Name: METASPLOITABLE
IP: 192.168.32.105
MAC Address: 08:00:27:98:12:F6
OS: Linux Kernel 2.6 on Ubuntu 8.04 (gutsy)

Vulnerabilities

134862 - Apache Tomcat AJP Connector Request Injection (Ghostcat)

Synopsis

There is a vulnerable AJP connector listening on the remote host.

Description

A file read/inclusion vulnerability was found in AJP connector. A remote, unauthenticated attacker could exploit this vulnerability to read web application files from a vulnerable server. In instances where the vulnerable server allows file uploads, an attacker could upload malicious JavaServer Pages (JSP) code within a variety of file types and gain remote code execution (RCE).

Solution

Update the AJP configuration to require authorization and/or upgrade the Tomcat server to 7.0.100, 8.5.51, 9.0.31 or later.

Risk Factor

High

CVSS v3.0 Base Score

9.8 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:H/A:H)

CVSS v3.0 Temporal Score

9.4 (CVSS:3.0/E:H/RL:O/RC:C)

VPR Score

9.0

CVSS v2.0 Base Score

7.5 (CVSS2#AV:N/AC:L/Au:N/C:P/I:P/A:P)

CVSS v2.0 Temporal Score

6.5 (CVSS2#E:H/RL:OF/RC:C)

Plugin Output

tcp/8009/ajp13

Nessus was able to exploit the issue using the following request :

```
0x0000:  02 02 00 08 48 54 54 50 2F 31 2E 31 00 00 0F 2F    ....HTTP/1.1.../
0x0010:  61 73 64 66 2F 78 78 78 78 78 2E 6A 73 70 00 00    asdf/xxxxx.jsp..
0x0020:  09 6C 6F 63 61 6C 68 6F 73 74 00 FF FF 00 09 6C    .localhost. .. l
0x0030:  6F 63 61 6C 68 6F 73 74 00 00 50 00 00 09 A0 06    ocalhost..P.....
0x0040:  00 0A 6B 65 65 70 2D 61 6C 69 76 65 00 00 0F 41    ..keep-alive...A
0x0050:  63 63 65 70 74 2D 4C 61 6E 67 75 61 67 65 00 00    ccept-Language..
0x0060:  0E 65 6E 2D 55 53 2C 65 6E 3B 71 3D 30 2E 35 00    .en-US,en;q=0.5.
0x0070:  A0 08 00 01 30 00 00 0F 41 63 63 65 70 74 2D 45    ....0...Accept-E
0x0080:  6E 63 6F 64 69 6E 67 00 00 13 67 7A 69 70 2C 20    ncoding...gzip,
0x0090:  64 65 66 6C 61 74 65 2C 20 73 64 63 68 00 00 0D    deflate, sdch...
0x00A0:  43 61 63 68 65 2D 43 6F 6E 74 72 6F 6C 00 00 09    Cache-Control...
0x00B0:  6D 61 78 2D 61 67 65 3D 30 00 A0 0E 00 07 4D 6F    max-age=0. .. Mo
0x00C0:  7A 69 6C 6C 61 00 00 19 55 70 67 72 61 64 65 2D    zilla...Upgrade-
0x00D0:  49 6E 73 65 63 75 72 65 2D 52 65 71 75 65 73 74    Insecure-Request
0x00E0:  73 00 00 01 31 00 A0 01 00 09 74 65 78 74 2F 68    s...1. .. text/h
0x00F0:  74 6D 6C 00 A0 0B 00 09 6C 6F 63 61 6C 68 6F 73    tml. .. localhos
0x0100:  74 00 0A 00 21 6A 61 76 61 78 2E 73 65 72 76 6C    t...!javax.servl
0x0110:  65 74 2E 69 6E 63 6C 75 64 65 2E 72 65 71 75 65    et.include.reque
0x0120:  73 74 5F 75 72 69 00 00 01 31 00 0A 00 1F 6A 61    st_uri...1. . ja
0x0130:  76 61 78 2E 73 65 72 76 6C 65 74 2E 69 6E 63 6C    vax.servlet.incl
0x0140:  75 64 65 2E 70 61 74 68 5F 69 6E 66 6F 00 00 10    ude.path_info...
0x0150:  2F 57 45 42 2D 49 4E 46 2F 77 65 62 2E 78 6D 6C    /WEB-INF/web.xml
0x0160:  00 0A 00 22 6A 61 76 61 78 2E 73 65 72 76 6C 65    ..."javax.servle
0x0170:  74 2E 69 6E 63 6C 75 64 65 2E 73 65 72 76 6C 65    t.include.servle
0x0180:  74 5F 70 61 74 68 00 00 00 00 FF                   t_path.....
```

This produced the following truncated output (limits [...]

171340 - Apache Tomcat Web Server SEoL (<=5.5.x)

Synopsis

The remote web server is obsolete / unsupported.

Description

According to its version, the Apache Tomcat web server is 5.5.x or earlier. It is, therefore, longer maintained by its vendor or provider.

Lack of support implies that no new security patches for the product will be released by the vendor. As a result, it may contain security vulnerabilities.

Solution

Remove the web server if it is no longer needed. Otherwise, upgrade to a supported version if possible or switch to another server.

Risk Factor

High

CVSS v3.0 Base Score

10.0 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:C/C:H/I:H/A:H)

CVSS v2.0 Base Score

7.5 (CVSS2#AV:N/AC:L/Au:N/C:P/I:P/A:P)

Plugin Output

tcp/8180/www

```
URL                                : http://192.168.32.105:8180/
Installed version                  : 5.5
Security End of Life               : August 10, 2011
Time since Security End of Life (Est.) : 11 Years, 9 Months, 26 Days | 4311 Total Days
```

32321 - Debian OpenSSH/OpenSSL Package Random Number Generator Weakness (SSL check)

Synopsis

The remote SSL certificate uses a weak key.

Description

The remote x509 certificate on the remote SSL server has been generated on a Debian or Ubuntu system which contains a bug in the random number generator of its OpenSSL library.

The problem is due to a Debian packager removing nearly all sources of entropy in the remote version of OpenSSL.

An attacker can easily obtain the private part of the remote key and use this to decipher the remote session or set up a man in the middle attack.

Solution

Consider all cryptographic material generated on the remote host to be guessable. In particular, all SSH, SSL and OpenVPN key material should be re-generated.

Risk Factor

Critical

VPR Score

7.4

CVSS v2.0 Base Score

10.0 (CVSS2#AV:N/AC:L/Au:N/C:C/I:C/A:C)

CVSS v2.0 Temporal Score

8.3 (CVSS2#E:F/RL:OF/RC:C)

Exploitable With

Core Impact (true)

Plugin Output

tcp/25/smtp

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Solution

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Risk Factor

Critical

VPR Score

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CVSS v2.0 Base Score

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CVSS v2.0 Temporal Score

8.3 (CVSS2#E:F/RL:OF/RC:C)

Exploitable With

Core Impact (true)

Plugin Output

tcp/5432/postgresql

20007 - SSL Version 2 and 3 Protocol Detection

Synopsis

The remote service encrypts traffic using a protocol with known weaknesses.

Description

The remote service accepts connections encrypted using SSL 2.0 and/or SSL 3.0. These versions of SSL are affected by several cryptographic flaws, including:

- An insecure padding scheme with CBC ciphers.

- Insecure session renegotiation and resumption schemes.

An attacker can exploit these flaws to conduct man-in-the-middle attacks or to decrypt communications between the affected service and clients.

Although SSL/TLS has a secure means for choosing the highest supported version of the protocol (so that these versions will be used only if the client or server support nothing better), many web browsers implement this in an unsafe way that allows an attacker to downgrade a connection (such as in POODLE). Therefore, it is recommended that these protocols be disabled entirely.

NIST has determined that SSL 3.0 is no longer acceptable for secure communications. As of the date of enforcement found in PCI DSS v3.1, any version of SSL will not meet the PCI SSC's definition of 'strong cryptography'.

Solution

Consult the application's documentation to disable SSL 2.0 and 3.0.

Use TLS 1.2 (with approved cipher suites) or higher instead.

Risk Factor

Critical

CVSS v3.0 Base Score

CVSS v2.0 Base Score

10.0 (CVSS2#AV:N/AC:L/Au:N/C:C/I:C/A:C)

Plugin Output

tcp/25/smtp

```
- SSLv2 is enabled and the server supports at least one cipher.

  Low Strength Ciphers (<= 64-bit key)

    Name                          Code              KEX          Auth     Encryption            MAC
    ----------------------        -------           --           --       --------------        --
    EXP-RC2-CBC-MD5                                 RSA(512)     RSA      RC2-CBC(40)           MD5
       export
    EXP-RC4-MD5                                     RSA(512)     RSA      RC4(40)               MD5
       export

  Medium Strength Ciphers (> 64-bit and < 112-bit key, or 3DES)

    Name                          Code              KEX          Auth     Encryption            MAC
    ----------------------        -------           --           --       --------------        --
    DES-CBC3-MD5                                    RSA          RSA      3DES-CBC(168)         MD5

  High Strength Ciphers (>= 112-bit key)

    Name                          Code              KEX          Auth     Encryption            MAC
    ----------------------        -------           --           --       ----------------      --
    RC4-MD5                                         RSA          RSA      RC4(128)              MD5

The fields above are :

  {Tenable ciphername}
  {Cipher ID code}
  Kex={key exchange}
  Auth={authentication}
  Encrypt={symmetric encryption method}
  MAC={message authentication code}
  {export flag}

- SSLv3 is enabled and the server supports at least one cipher.
Explanation: TLS 1.0 and SSL 3.0 cipher suites may be used with SSLv3


  Low Strength Ciphers (<= 64-bit key)

    Name                          Code              KEX          Auth     Encryption            MAC
    ----------------------        -------           --           --       --------------        --
    EXP-EDH-RSA-DES-CBC-SHA                         DH(512)      RSA      DES-CBC(40)
SHA1        export
    EDH-RSA-DES-CBC-SHA                             DH           RSA      DES-CBC(56)           SHA
[...]
```

20007 - SSL Version 2 and 3 Protocol Detection

Synopsis

The remote service encrypts traffic using a protocol with known weaknesses.

Description

The remote service accepts connections encrypted using SSL 2.0 and/or SSL 3.0. These versions of SSL are affected by several cryptographic flaws, including:

- An insecure padding scheme with CBC ciphers.

- Insecure session renegotiation and resumption schemes.

An attacker can exploit these flaws to conduct man-in-the-middle attacks or to decrypt communications between the affected service and clients.

Although SSL/TLS has a secure means for choosing the highest supported version of the protocol (so that these versions will be used only if the client or server support nothing better), many web browsers implement this in an unsafe way that allows an attacker to downgrade a connection (such as in POODLE). Therefore, it is recommended that these protocols be disabled entirely.

NIST has determined that SSL 3.0 is no longer acceptable for secure communications. As of the date of enforcement found in PCI DSS v3.1, any version of SSL will not meet the PCI SSC's definition of 'strong cryptography'.

Solution

Consult the application's documentation to disable SSL 2.0 and 3.0.

Use TLS 1.2 (with approved cipher suites) or higher instead.

Risk Factor

Critical

CVSS v3.0 Base Score

9.8 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:H/A:H)

CVSS v2.0 Base Score

10.0 (CVSS2#AV:N/AC:L/Au:N/C:C/I:C/A:C)

Plugin Output

tcp/5432/postgresql

```
- SSLv3 is enabled and the server supports at least one cipher.
Explanation: TLS 1.0 and SSL 3.0 cipher suites may be used with SSLv3


  Medium Strength Ciphers (> 64-bit and < 112-bit key, or 3DES)

    Name                          Code              KEX           Auth     Encryption            MAC
    ----------------------        -------           --            ---      --------------        --
    EDH-RSA-DES-CBC3-SHA                            DH            RSA      3DES-CBC(168)
SHA1
    DES-CBC3-SHA                                    RSA           RSA      3DES-CBC(168)
SHA1

  High Strength Ciphers (>= 112-bit key)

    Name                          Code              KEX           Auth     Encryption            MAC
    ----------------------        -------           --            ---      --------------        --
    DHE-RSA-AES128-SHA                              DH            RSA      AES-CBC(128)
SHA1
    DHE-RSA-AES256-SHA                              DH            RSA      AES-CBC(256)
SHA1
    AES128-SHA                                      RSA           RSA      AES-CBC(128)
SHA1
    AES256-SHA                                      RSA           RSA      AES-CBC(256)
SHA1
    RC4-SHA                                         RSA           RSA      RC4(128)
SHA1

The fields above are :

  [Tenable ciphername]
  [Cipher ID code]
  Kex=[key exchange]
  Auth=[authentication]
  Encrypt=[symmetric encryption method]
  MAC=[message authentication code]
  [export flag]
```

33850 - Unix Operating System Unsupported Version Detection

Synopsis

The operating system running on the remote host is no longer supported.

Description

According to its self-reported version number, the Unix operating system running on the remote host is no longer supported.

Lack of support implies that no new security patches for the product will be released by the vendor. As a result, it is likely to contain security vulnerabilities.

Solution

Upgrade to a version of the Unix operating system that is currently supported.

Risk Factor

Critical

CVSS v3.0 Base Score

10.0 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:C/C:H/I:H/A:H)

CVSS v2.0 Base Score

10.0 (CVSS2#AV:N/AC:L/Au:N/C:C/I:C/A:C)

Plugin Output

tcp/0

```
Ubuntu 8.04 support ended on 2011-05-12 (Desktop) / 2013-05-09 (Server).
Upgrade to Ubuntu 21.04 / LTS 20.04 / LTS 18.04.

For more information, see : https://wiki.ubuntu.com/Releases
```

136769 - ISC BIND Service Downgrade / Reflected DoS

Synopsis

The remote name server is affected by Service Downgrade / Reflected DoS vulnerabilities.

Description

According to its self-reported version, the instance of ISC BIND 9 running on the remote name server is affected by performance downgrade and Reflected DoS vulnerabilities. This is due to BIND DNS not sufficiently limiting the number fetches which may be performed while processing a referral response.

An unauthenticated, remote attacker can exploit this to cause degrade the service of the recursive server or to use the affected server as a reflector in a reflection attack.

Solution

Upgrade to the ISC BIND version referenced in the vendor advisory.

Risk Factor

Medium

CVSS v3.0 Base Score

8.6 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:C/C:N/I:N/A:H)

CVSS v3.0 Temporal Score

7.5 (CVSS:3.0/E:U/RL:O/RC:C)

VPR Score

5.2

CVSS v2.0 Base Score

5.0 (CVSS2#AV:N/AC:L/Au:N/C:N/I:N/A:P)

CVSS v2.0 Temporal Score

3.7 (CVSS2#E:U/RL:OF/RC:C)

STIG Severity

Plugin Information

Published: 2020/05/22, Modified: 2020/06/26

Plugin Output

udp/53/dns

```
Installed version : 9.4.2
Fixed version     : 9.11.19
```

42873 - SSL Medium Strength Cipher Suites Supported (SWEET32)

Synopsis

The remote service supports the use of medium strength SSL ciphers.

Description

The remote host supports the use of SSL ciphers that offer medium strength encryption. Nessus regards medium strength as any encryption that uses key lengths at least 64 bits and less than 112 bits, or else that uses the 3DES encryption suite.

Note that it is considerably easier to circumvent medium strength encryption if the attacker is on the same physical network.

Solution

Reconfigure the affected application if possible to avoid use of medium strength ciphers.

Risk Factor

Medium

CVSS v3.0 Base Score

7.5 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:N/A:N)

VPR Score

6.1

CVSS v2.0 Base Score

5.0 (CVSS2#AV:N/AC:L/Au:N/C:P/I:N/A:N)

References

CVE	CVE-2016-2183

Plugin Output

tcp/25/smtp

```
Medium Strength Ciphers (> 64-bit and < 112-bit key, or 3DES)

   Name                         Code              KEX      Auth     Encryption            MAC
   ---------------------------  ----------------  -------  -------  --------------------  ---
   DES-CBC3-MD5                 0x07, 0x00, 0xC0  RSA      RSA      3DES-CBC(168)         MD5
   EDH-RSA-DES-CBC3-SHA         0x00, 0x16        DH       RSA      3DES-CBC(168)
SHA1
   ADH-DES-CBC3-SHA             0x00, 0x1B        DH       None     3DES-CBC(168)
SHA1
   DES-CBC3-SHA                 0x00, 0x0A        RSA      RSA      3DES-CBC(168)
SHA1

The fields above are :

  {Tenable ciphername}
  {Cipher ID code}
  Kex={key exchange}
  Auth={authentication}
  Encrypt={symmetric encryption method}
  MAC={message authentication code}
  {export flag}
```

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Description

The remote host supports the use of SSL ciphers that offer medium strength encryption. Nessus regards medium strength as any encryption that uses key lengths at least 64 bits and less than 112 bits, or else that uses the 3DES encryption suite.

Note that it is considerably easier to circumvent medium strength encryption if the attacker is on the same physical network.

Solution

Reconfigure the affected application if possible to avoid use of medium strength ciphers.

Risk Factor

Medium

CVSS v3.0 Base Score

7.5 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:N/A:N)

VPR Score

6.1

CVSS v2.0 Base Score

5.0 (CVSS2#AV:N/AC:L/Au:N/C:P/I:N/A:N)

Plugin Information

Published: 2009/11/23, Modified: 2021/02/03

Plugin Output

tcp/5432/postgresql

```
  Medium Strength Ciphers (> 64-bit and < 112-bit key, or 3DES)

    Name                          Code              KEX      Auth     Encryption            MAC
    ----------------------        -------           --       ----     ----------------      ---
    EDH-RSA-DES-CBC3-SHA          0x00, 0x16        DH       RSA      3DES-CBC(168)
SHA1
    DES-CBC3-SHA                  0x00, 0x0A        RSA      RSA      3DES-CBC(168)
SHA1

The fields above are :

  {Tenable ciphername}
  {Cipher ID code}
  Kex={key exchange}
  Auth={authentication}
  Encrypt={symmetric encryption method}
  MAC={message authentication code}
  {export flag}
```

90509 - Samba Badlock Vulnerability

Synopsis

An SMB server running on the remote host is affected by the Badlock vulnerability.

Description

The version of Samba, a CIFS/SMB server for Linux and Unix, running on the remote host is affected by a flaw, known as Badlock, that exists in the Security Account Manager (SAM) and Local Security Authority (Domain Policy) (LSAD) protocols due to improper authentication level negotiation over Remote Procedure Call (RPC) channels. A man-in-the-middle attacker who is able to able to intercept the traffic between a client and a server hosting a SAM database can exploit this flaw to force a downgrade of the authentication level, which allows the execution of arbitrary Samba network calls in the context of the intercepted user, such as viewing or modifying sensitive security data in the Active Directory (AD) database or disabling critical services.

Solution

Upgrade to Samba version 4.2.11 / 4.3.8 / 4.4.2 or later.

Risk Factor

Medium

CVSS v3.0 Base Score

7.5 (CVSS:3.0/AV:N/AC:H/PR:N/UI:R/S:U/C:H/I:H/A:H)

CVSS v3.0 Temporal Score

6.5 (CVSS:3.0/E:U/RL:O/RC:C)

VPR Score

6.7

CVSS v2.0 Base Score

6.8 (CVSS2#AV:N/AC:M/Au:N/C:P/I:P/A:P)

CVSS v2.0 Temporal Score

5.0 (CVSS2#E:U/RL:OF/RC:C)

References

BID 86002

Plugin Output

tcp/445/cifs

```
Nessus detected that the Samba Badlock patch has not been applied.
```

10205 - rlogin Service Detection

Synopsis

The rlogin service is running on the remote host.

Description

The rlogin service is running on the remote host. This service is vulnerable since data is passed between the rlogin client and server in cleartext. A man-in-the-middle attacker can exploit this to sniff logins and passwords. Also, it may allow poorly authenticated logins without passwords. If the host is vulnerable to TCP sequence number guessing (from any network) or IP spoofing (including ARP hijacking on a local network) then it may be possible to bypass authentication.

Finally, rlogin is an easy way to turn file-write access into full logins through the .rhosts or rhosts.equiv files.

Solution

Comment out the 'login' line in /etc/inetd.conf and restart the inetd process. Alternatively, disable this service and use SSH instead.

Risk Factor

High

VPR Score

6.7

CVSS v2.0 Base Score

7.5 (CVSS2#AV:N/AC:L/Au:N/C:P/I:P/A:P)

Exploitable With

Metasploit (true)

Plugin Output

tcp/513/rlogin

12085 - Apache Tomcat Default Files

Synopsis

The remote web server contains default files.

Description

The default error page, default index page, example JSPs and/or example servlets are installed on the remote Apache Tomcat server. These files should be removed as they may help an attacker uncover information about the remote Tomcat install or host itself.

Solution

Delete the default index page and remove the example JSP and servlets. Follow the Tomcat or OWASP instructions to replace or modify the default error page.

Risk Factor

Medium

CVSS v3.0 Base Score

5.3 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:L/I:N/A:N)

CVSS v2.0 Base Score

5.0 (CVSS2#AV:N/AC:L/Au:N/C:P/I:N/A:N)

Plugin Output

tcp/8180/www

```
The following default files were found :

http://192.168.32.105:8180/tomcat-docs/index.html

The server is not configured to return a custom page in the event of a client requesting a non-
existent resource.
This may result in a potential disclosure of sensitive information about the server to attackers.
```

11213 - HTTP TRACE / TRACK Methods Allowed

Synopsis

Debugging functions are enabled on the remote web server.

Description

The remote web server supports the TRACE and/or TRACK methods. TRACE and TRACK are HTTP methods that are used to debug web server connections.

Solution

Disable these HTTP methods. Refer to the plugin output for more information.

Risk Factor

Medium

CVSS v3.0 Base Score

5.3 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:L/I:N/A:N)

CVSS v3.0 Temporal Score

4.6 (CVSS:3.0/E:U/RL:O/RC:C)

VPR Score

4.0

CVSS v2.0 Base Score

5.0 (CVSS2#AV:N/AC:L/Au:N/C:P/I:N/A:N)

Plugin Output

tcp/80/www

```
To disable these methods, add the following lines for each virtual
host in your configuration file :

    RewriteEngine on
    RewriteCond %{REQUEST_METHOD} ^(TRACE|TRACK)
    RewriteRule .* - [F]

Alternatively, note that Apache versions 1.3.34, 2.0.55, and 2.2
support disabling the TRACE method natively via the 'TraceEnable'
directive.

Nessus sent the following TRACE request :

------------------------ snip ------------------------
TRACE /Nessus164782509.html HTTP/1.1
Connection: Close
Host: 192.168.32.105
Pragma: no-cache
User-Agent: Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 5.1; Trident/4.0)
Accept: image/gif, image/x-xbitmap, image/jpeg, image/pjpeg, image/png, */*
Accept-Language: en
Accept-Charset: iso-8859-1,*,utf-8

------------------------ snip ------------------------

and received the following response from the remote server :

------------------------ snip ------------------------
HTTP/1.1 200 OK
Date: Fri, 02 Jun 2023 16:59:19 GMT
Server: Apache/2.2.8 (Ubuntu) DAV/2
Keep-Alive: timeout=15, max=100
Connection: Keep-Alive
Transfer-Encoding: chunked
Content-Type: message/http


TRACE /Nessus164782509.html HTTP/1.1
```

```
Connection: Keep-Alive
Host: 192.168.32.105
Pragma: no-cache
User-Agent: Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 5.1; Trident/4.0)
Accept: image/gif, image/x-xbitmap, image/jpeg, image/pjpeg, image/png, */*
Accept-Language: en
Accept-Charset: iso-8859-1,*,utf-8

------------------------ snip ------------------------
```

139915 - ISC BIND 9.x < 9.11.22, 9.12.x < 9.16.6, 9.17.x < 9.17.4 DoS

Synopsis

The remote name server is affected by a denial of service vulnerability.

Description

According to its self-reported version number, the installation of ISC BIND running on the remote name server is version 9.x prior to 9.11.22, 9.12.x prior to 9.16.6 or 9.17.x prior to 9.17.4. It is, therefore, affected by a denial of service (DoS) vulnerability due to an assertion failure when attempting to verify a truncated response to a TSIG-signed request. An authenticated, remote attacker can exploit this issue by sending a truncated response to a TSIG-signed request to trigger an assertion failure, causing the server to exit.

Note that Nessus has not tested for this issue but has instead relied only on the application's self-reported version number.

Solution

Upgrade to BIND 9.11.22, 9.16.6, 9.17.4 or later.

Risk Factor

Medium

CVSS v3.0 Base Score

6.5 (CVSS:3.0/AV:N/AC:L/PR:L/UI:N/S:U/C:N/I:N/A:H)

CVSS v3.0 Temporal Score

5.7 (CVSS:3.0/E:U/RL:O/RC:C)

VPR Score

3.6

CVSS v2.0 Base Score

4.0 (CVSS2#AV:N/AC:L/Au:S/C:N/I:N/A:P)

CVSS v2.0 Temporal Score

(CVSS2#E:U/RL:OF/RC:C)

STIG Severity

I

Plugin Output

udp/53/dns

```
Installed version : 9.4.2
Fixed version     : 9.11.22, 9.16.6, 9.17.4 or later
```

136808 - ISC BIND Denial of Service

Synopsis

The remote name server is affected by an assertion failure vulnerability.

Description

A denial of service (DoS) vulnerability exists in ISC BIND versions 9.11.18 / 9.11.18-S1 / 9.12.4-P2 / 9.13 / 9.14.11 / 9.15 / 9.16.2 / 9.17 / 9.17.1 and earlier. An unauthenticated, remote attacker can exploit this issue, via a specially-crafted message, to cause the service to stop responding.

Note that Nessus has not tested for this issue but has instead relied only on the application's self-reported version number.

Solution

Upgrade to the patched release most closely related to your current version of BIND.

Risk Factor

Medium

CVSS v3.0 Base Score

5.9 (CVSS:3.0/AV:N/AC:H/PR:N/UI:N/S:U/C:N/I:N/A:H)

CVSS v3.0 Temporal Score

5.3 (CVSS:3.0/E:P/RL:O/RC:C)

VPR Score

5.1

CVSS v2.0 Base Score

4.3 (CVSS2#AV:N/AC:M/Au:N/C:N/I:N/A:P)

CVSS v2.0 Temporal Score

3.4 (CVSS2#E:POC/RL:OF/RC:C)

STIG Severity

Plugin Information

Published: 2020/05/22, Modified: 2023/03/23

Plugin Output

udp/53/dns

```
Installed version : 9.4.2
Fixed version     : 9.11.19
```

57608 - SMB Signing not required

Synopsis

Signing is not required on the remote SMB server.

Description

Signing is not required on the remote SMB server. An unauthenticated, remote attacker can exploit this to conduct man-in-the-middle attacks against the SMB server.

Solution

Enforce message signing in the host's configuration. On Windows, this is found in the policy setting 'Microsoft network server: Digitally sign communications (always)'. On Samba, the setting is called 'server signing'. See the 'see also' links for further details.

Risk Factor

Medium

CVSS v3.0 Base Score

5.3 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:L/A:N)

CVSS v3.0 Temporal Score

4.6 (CVSS:3.0/E:U/RL:O/RC:C)

CVSS v2.0 Base Score

5.0 (CVSS2#AV:N/AC:L/Au:N/C:N/I:P/A:N)

CVSS v2.0 Temporal Score

3.7 (CVSS2#E:U/RL:OF/RC:C)

Plugin Output

tcp/445/cifs

52611 - SMTP Service STARTTLS Plaintext Command Injection

Synopsis

The remote mail service allows plaintext command injection while negotiating an encrypted communications channel.

Description

The remote SMTP service contains a software flaw in its STARTTLS implementation that could allow a remote, unauthenticated attacker to inject commands during the plaintext protocol phase that will be executed during the ciphertext protocol phase.

Successful exploitation could allow an attacker to steal a victim's email or associated SASL (Simple Authentication and Security Layer) credentials.

Solution

Contact the vendor to see if an update is available.

Risk Factor

Medium

VPR Score

6.3

CVSS v2.0 Base Score

4.0 (CVSS2#AV:N/AC:H/Au:N/C:P/I:P/A:N)

CVSS v2.0 Temporal Score

(CVSS2#E:POC/RL:OF/RC:C)

Plugin Output

tcp/25/smtp

```
Nessus sent the following two commands in a single packet :

  STARTTLS\r\nRSET\r\n

And the server sent the following two responses :

  220 2.0.0 Ready to start TLS
  250 2.0.0 Ok
```

31705 - SSL Anonymous Cipher Suites Supported

Synopsis

The remote service supports the use of anonymous SSL ciphers.

Description

The remote host supports the use of anonymous SSL ciphers. While this enables an administrator to set up a service that encrypts traffic without having to generate and configure SSL certificates, it offers no way to verify the remote host's identity and renders the service vulnerable to a man-in-the-middle attack.

Note: This is considerably easier to exploit if the attacker is on the same physical network.

Solution

Reconfigure the affected application if possible to avoid use of weak ciphers.

Risk Factor

Low

CVSS v3.0 Base Score

5.9 (CVSS:3.0/AV:N/AC:H/PR:N/UI:N/S:U/C:H/I:N/A:N)

CVSS v3.0 Temporal Score

5.2 (CVSS:3.0/E:U/RL:O/RC:C)

VPR Score

3.6

CVSS v2.0 Base Score

2.6 (CVSS2#AV:N/AC:H/Au:N/C:P/I:N/A:N)

CVSS v2.0 Temporal Score

1.9 (CVSS2#E:U/RL:OF/RC:C)

References

BID 28482

Plugin Output

tcp/25/smtp

```
The following is a list of SSL anonymous ciphers supported by the remote TCP server :

  Low Strength Ciphers (<= 64-bit key)

    Name                          Code              KEX      Auth     Encryption              MAC
    ----------------------        -------           --       --       ---------------         --
    EXP-ADH-DES-CBC-SHA           0x00, 0x19        DH(512)  None     DES-CBC(40)
SHA1      export
    EXP-ADH-RC4-MD5               0x00, 0x17        DH(512)  None     RC4(40)                 MD5
      export
    ADH-DES-CBC-SHA               0x00, 0x1A        DH       None     DES-CBC(56)
SHA1

  Medium Strength Ciphers (> 64-bit and < 112-bit key, or 3DES)

    Name                          Code              KEX      Auth     Encryption              MAC
    ----------------------        -------           --       --       ---------------         --
    ADH-DES-CBC3-SHA              0x00, 0x1B        DH       None     3DES-CBC(168)
SHA1

  High Strength Ciphers (>= 112-bit key)

    Name                          Code              KEX      Auth     Encryption              MAC
    ----------------------        -------           --       --       ---------------         --
    ADH-AES128-SHA                0x00, 0x34        DH       None     AES-CBC(128)
SHA1
    ADH-AES256-SHA                0x00, 0x3A        DH       None     AES-CBC(256)
SHA1
    ADH-RC4-MD5                   0x00, 0x18        DH       None     RC4(128)                MD5

The fields above are :

  {Tenable ciphername}
  {Cipher ID code}
  Kex={key exchange}
  Auth={authentication}
  Encrypt={symmetric encryption method}
  MAC={message authentication code}
  {export flag}
```

51192 - SSL Certificate Cannot Be Trusted

Synopsis

The SSL certificate for this service cannot be trusted.

Description

The server's X.509 certificate cannot be trusted. This situation can occur in three different ways, in which the chain of trust can be broken, as stated below :

- First, the top of the certificate chain sent by the server might not be descended from a known public certificate authority. This can occur either when the top of the chain is an unrecognized, self-signed certificate, or when intermediate certificates are missing that would connect the top of the certificate chain to a known public certificate authority.

- Second, the certificate chain may contain a certificate that is not valid at the time of the scan. This can occur either when the scan occurs before one of the certificate's 'notBefore' dates, or after one of the certificate's 'notAfter' dates.

- Third, the certificate chain may contain a signature that either didn't match the certificate's information or could not be verified. Bad signatures can be fixed by getting the certificate with the bad signature to be re-signed by its issuer. Signatures that could not be verified are the result of the certificate's issuer using a signing algorithm that Nessus either does not support or does not recognize.

If the remote host is a public host in production, any break in the chain makes it more difficult for users to verify the authenticity and identity of the web server. This could make it easier to carry out man-in-the-middle attacks against the remote host.

Solution

Purchase or generate a proper SSL certificate for this service.

Risk Factor

Medium

CVSS v3.0 Base Score

6.5 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:L/I:L/A:N)

CVSS v2.0 Base Score

6.4 (CVSS2#AV:N/AC:L/Au:N/C:P/I:P/A:N)

Plugin Output

tcp/25/smtp

```
The following certificate was part of the certificate chain
sent by the remote host, but it has expired :

|-Subject    : C=XX/ST=There is no such thing outside US/L=Everywhere/O=OCOSA/OU=Office for
 Complication of Otherwise Simple Affairs/CN=ubuntu804-base.localdomain/E=root@ubuntu804-
base.localdomain
|-Not After : Apr 16 14:07:45 2010 GMT

The following certificate was at the top of the certificate
chain sent by the remote host, but it is signed by an unknown
certificate authority :

|-Subject : C=XX/ST=There is no such thing outside US/L=Everywhere/O=OCOSA/OU=Office for
 Complication of Otherwise Simple Affairs/CN=ubuntu804-base.localdomain/E=root@ubuntu804-
base.localdomain
|-Issuer : C=XX/ST=There is no such thing outside US/L=Everywhere/O=OCOSA/OU=Office for
 Complication of Otherwise Simple Affairs/CN=ubuntu804-base.localdomain/E=root@ubuntu804-
base.localdomain
```

Plugin Output

tcp/5432/postgresql

```
The following certificate was part of the certificate chain
sent by the remote host, but it has expired :

|-Subject    : C=XX/ST=There is no such thing outside US/L=Everywhere/O=OCOSA/OU=Office for
 Complication of Otherwise Simple Affairs/CN=ubuntu804-base.localdomain/E=root@ubuntu804-
base.localdomain
|-Not After : Apr 16 14:07:45 2010 GMT

The following certificate was at the top of the certificate
chain sent by the remote host, but it is signed by an unknown
certificate authority :

|-Subject : C=XX/ST=There is no such thing outside US/L=Everywhere/O=OCOSA/OU=Office for
 Complication of Otherwise Simple Affairs/CN=ubuntu804-base.localdomain/E=root@ubuntu804-
base.localdomain
|-Issuer : C=XX/ST=There is no such thing outside US/L=Everywhere/O=OCOSA/OU=Office for
 Complication of Otherwise Simple Affairs/CN=ubuntu804-base.localdomain/E=root@ubuntu804-
base.localdomain
```

15901 - SSL Certificate Expiry

Synopsis

The remote server's SSL certificate has already expired.

Description

This plugin checks expiry dates of certificates associated with SSL-enabled services on the target and reports whether any have already expired.

Solution

Purchase or generate a new SSL certificate to replace the existing one.

Risk Factor

Medium

CVSS v3.0 Base Score

5.3 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:L/A:N)

CVSS v2.0 Base Score

5.0 (CVSS2#AV:N/AC:L/Au:N/C:N/I:P/A:N)

Plugin Output

tcp/25/smtp

```
The SSL certificate has already expired :

  Subject          : C=XX, ST=There is no such thing outside US, L=Everywhere, O=OCOSA,
OU=Office for Complication of Otherwise Simple Affairs, CN=ubuntu804-base.localdomain,
emailAddress=root@ubuntu804-base.localdomain
  Issuer           : C=XX, ST=There is no such thing outside US, L=Everywhere, O=OCOSA,
OU=Office for Complication of Otherwise Simple Affairs, CN=ubuntu804-base.localdomain,
emailAddress=root@ubuntu804-base.localdomain
  Not valid before : Mar 17 14:07:45 2010 GMT
  Not valid after  : Apr 16 14:07:45 2010 GMT
```

15901 - SSL Certificate Expiry

Synopsis

The remote server's SSL certificate has already expired.

Description

This plugin checks expiry dates of certificates associated with SSL-enabled services on the target and reports whether any have already expired.

Solution

Purchase or generate a new SSL certificate to replace the existing one.

Risk Factor

Medium

CVSS v3.0 Base Score

5.3 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:L/A:N)

CVSS v2.0 Base Score

5.0 (CVSS2#AV:N/AC:L/Au:N/C:N/I:P/A:N)

Plugin Output

tcp/5432/postgresql

```
The SSL certificate has already expired :

  Subject          : C=XX, ST=There is no such thing outside US, L=Everywhere, O=OCOSA,
OU=Office for Complication of Otherwise Simple Affairs, CN=ubuntu804-base.localdomain,
emailAddress=root@ubuntu804-base.localdomain
  Issuer           : C=XX, ST=There is no such thing outside US, L=Everywhere, O=OCOSA,
OU=Office for Complication of Otherwise Simple Affairs, CN=ubuntu804-base.localdomain,
emailAddress=root@ubuntu804-base.localdomain
  Not valid before : Mar 17 14:07:45 2010 GMT
  Not valid after  : Apr 16 14:07:45 2010 GMT
```

45411 - SSL Certificate with Wrong Hostname

Synopsis

The SSL certificate for this service is for a different host.

Description

The 'commonName' (CN) attribute of the SSL certificate presented for this service is for a different machine.

Solution

Purchase or generate a proper SSL certificate for this service.

Risk Factor

Medium

CVSS v3.0 Base Score

5.3 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:L/A:N)

CVSS v2.0 Base Score

5.0 (CVSS2#AV:N/AC:L/Au:N/C:N/I:P/A:N)

Plugin Output

tcp/25/smtp

```
The identities known by Nessus are :

  192.168.32.105
  192.168.32.105

The Common Name in the certificate is :

  ubuntu804-base.localdomain
```

89058 - SSL DROWN Attack Vulnerability (Decrypting RSA with Obsolete and Weakened eNcryption)

Synopsis

The remote host may be affected by a vulnerability that allows a remote attacker to potentially decrypt captured TLS traffic.

Description

The remote host supports SSLv2 and therefore may be affected by a vulnerability that allows a cross-protocol Bleichenbacher padding oracle attack known as DROWN (Decrypting RSA with Obsolete and Weakened eNcryption). This vulnerability exists due to a flaw in the Secure Sockets Layer Version 2 (SSLv2) implementation, and it allows captured TLS traffic to be decrypted. A man-in-the-middle attacker can exploit this to decrypt the TLS connection by utilizing previously captured traffic and weak cryptography along with a series of specially crafted connections to an SSLv2 server that uses the same private key.

Solution

Disable SSLv2 and export grade cryptography cipher suites. Ensure that private keys are not used anywhere with server software that supports SSLv2 connections.

Risk Factor

Medium

CVSS v3.0 Base Score

5.9 (CVSS:3.0/AV:N/AC:H/PR:N/UI:N/S:U/C:H/I:N/A:N)

CVSS v3.0 Temporal Score

5.2 (CVSS:3.0/E:U/RL:O/RC:C)

VPR Score

4.4

Plugin Output

tcp/25/smtp

```
The remote host is affected by SSL DROWN and supports the following
vulnerable cipher suites :

  Low Strength Ciphers (<= 64-bit key)

    Name                          Code              KEX           Auth     Encryption            MAC
    ----------------------        --------          --            --       ---------------       --
    EXP-RC2-CBC-MD5               0x04, 0x00, 0x80  RSA(512)      RSA      RC2-CBC(40)           MD5
      export
    EXP-RC4-MD5                   0x02, 0x00, 0x80  RSA(512)      RSA      RC4(40)               MD5
      export

  High Strength Ciphers (>= 112-bit key)

    Name                          Code              KEX           Auth     Encryption            MAC
    ----------------------        --------          --            --       ---------------       --
    RC4-MD5                       0x01, 0x00, 0x80  RSA           RSA      RC4(128)              MD5

The fields above are :

  {Tenable ciphername}
  {Cipher ID code}
  Kex={key exchange}
  Auth={authentication}
  Encrypt={symmetric encryption method}
  MAC={message authentication code}
  {export flag}
```

65821 - SSL RC4 Cipher Suites Supported (Bar Mitzvah)

Synopsis

The remote service supports the use of the RC4 cipher.

Description

The remote host supports the use of RC4 in one or more cipher suites.

The RC4 cipher is flawed in its generation of a pseudo-random stream of bytes so that a wide variety of small biases are introduced into the stream, decreasing its randomness.

If plaintext is repeatedly encrypted (e.g., HTTP cookies), and an attacker is able to obtain many (i.e., tens of millions) ciphertexts, the attacker may be able to derive the plaintext.

Solution

Reconfigure the affected application, if possible, to avoid use of RC4 ciphers. Consider using TLS 1.2 with AES-GCM suites subject to browser and web server support.

Risk Factor

Medium

CVSS v3.0 Base Score

5.9 (CVSS:3.0/AV:N/AC:H/PR:N/UI:N/S:U/C:H/I:N/A:N)

CVSS v3.0 Temporal Score

5.4 (CVSS:3.0/E:U/RL:X/RC:C)

VPR Score

3.6

CVSS v2.0 Base Score

4.3 (CVSS2#AV:N/AC:M/Au:N/C:P/I:N/A:N)

Plugin Output

tcp/25/smtp

```
List of RC4 cipher suites supported by the remote server :

  Low Strength Ciphers (<= 64-bit key)

    Name                          Code              KEX          Auth     Encryption            MAC
    ----------------------        --------          --           --       ----------------      --
    EXP-RC4-MD5                   0x02, 0x00, 0x80  RSA(512)     RSA      RC4(40)               MD5
       export
    EXP-ADH-RC4-MD5               0x00, 0x17        DH(512)      None     RC4(40)               MD5
       export
    EXP-RC4-MD5                   0x00, 0x03        RSA(512)     RSA      RC4(40)               MD5
       export

  High Strength Ciphers (>= 112-bit key)

    Name                          Code              KEX          Auth     Encryption            MAC
    ----------------------        --------          --           --       ----------------      --
    RC4-MD5                       0x01, 0x00, 0x80  RSA          RSA      RC4(128)              MD5
    ADH-RC4-MD5                   0x00, 0x18        DH           None     RC4(128)              MD5
    RC4-MD5                       0x00, 0x04        RSA          RSA      RC4(128)              MD5
    RC4-SHA                       0x00, 0x05        RSA          RSA      RC4(128)
  SHA1

The fields above are :

  {Tenable ciphername}
  {Cipher ID code}
  Kex={key exchange}
  Auth={authentication}
  Encrypt={symmetric encryption method}
  MAC={message authentication code}
  {export flag}
```

65821 - SSL RC4 Cipher Suites Supported (Bar Mitzvah)

Synopsis

The remote service supports the use of the RC4 cipher.

Description

The remote host supports the use of RC4 in one or more cipher suites.

The RC4 cipher is flawed in its generation of a pseudo-random stream of bytes so that a wide variety of small biases are introduced into the stream, decreasing its randomness.

If plaintext is repeatedly encrypted (e.g., HTTP cookies), and an attacker is able to obtain many (i.e., tens of millions) ciphertexts, the attacker may be able to derive the plaintext.

Solution

Reconfigure the affected application, if possible, to avoid use of RC4 ciphers. Consider using TLS 1.2 with AES-GCM suites subject to browser and web server support.

Risk Factor

Medium

CVSS v3.0 Base Score

5.9 (CVSS:3.0/AV:N/AC:H/PR:N/UI:N/S:U/C:H/I:N/A:N)

CVSS v3.0 Temporal Score

5.4 (CVSS:3.0/E:U/RL:X/RC:C)

VPR Score

3.6

CVSS v2.0 Base Score

4.3 (CVSS2#AV:N/AC:M/Au:N/C:P/I:N/A:N)

Plugin Output

tcp/5432/postgresql

```
List of RC4 cipher suites supported by the remote server :

  High Strength Ciphers (>= 112-bit key)

    Name                          Code              KEX          Auth     Encryption            MAC
    ----------------              ------            ---          ----     --------------        ---
    RC4-SHA                       0x00, 0x05        RSA          RSA      RC4(128)
  SHA1

The fields above are :

  {Tenable ciphername}
  {Cipher ID code}
  Kex={key exchange}
  Auth={authentication}
  Encrypt={symmetric encryption method}
  MAC={message authentication code}
  {export flag}
```

57582 - SSL Self-Signed Certificate

Synopsis

The SSL certificate chain for this service ends in an unrecognized self-signed certificate.

Description

The X.509 certificate chain for this service is not signed by a recognized certificate authority. If the remote host is a public host in production, this nullifies the use of SSL as anyone could establish a man-in-the-middle attack against the remote host.

Note that this plugin does not check for certificate chains that end in a certificate that is not self-signed, but is signed by an unrecognized certificate authority.

Solution

Purchase or generate a proper SSL certificate for this service.

Risk Factor

Medium

CVSS v3.0 Base Score

6.5 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:L/I:L/A:N)

CVSS v2.0 Base Score

6.4 (CVSS2#AV:N/AC:L/Au:N/C:P/I:P/A:N)

Plugin Output

tcp/25/smtp

```
The following certificate was found at the top of the certificate
chain sent by the remote host, but is self-signed and was not
found in the list of known certificate authorities :

|-Subject : C=XX/ST=There is no such thing outside US/L=Everywhere/O=OCOSA/OU=Office for
 Complication of Otherwise Simple Affairs/CN=ubuntu804-base.localdomain/E=root@ubuntu804-
base.localdomain
```

57582 - SSL Self-Signed Certificate

Synopsis

The SSL certificate chain for this service ends in an unrecognized self-signed certificate.

Description

The X.509 certificate chain for this service is not signed by a recognized certificate authority. If the remote host is a public host in production, this nullifies the use of SSL as anyone could establish a man-in-the-middle attack against the remote host.

Note that this plugin does not check for certificate chains that end in a certificate that is not self-signed, but is signed by an unrecognized certificate authority.

Solution

Purchase or generate a proper SSL certificate for this service.

Risk Factor

Medium

CVSS v3.0 Base Score

6.5 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:L/I:L/A:N)

CVSS v2.0 Base Score

6.4 (CVSS2#AV:N/AC:L/Au:N/C:P/I:P/A:N)

Plugin Output

tcp/5432/postgresql

```
The following certificate was found at the top of the certificate
chain sent by the remote host, but is self-signed and was not
found in the list of known certificate authorities :

|-Subject : C=XX/ST=There is no such thing outside US/L=Everywhere/O=OCOSA/OU=Office for
 Complication of Otherwise Simple Affairs/CN=ubuntu804-base.localdomain/E=root@ubuntu804-
base.localdomain
```

26928 - SSL Weak Cipher Suites Supported

Synopsis

The remote service supports the use of weak SSL ciphers.

Description

The remote host supports the use of SSL ciphers that offer weak encryption.

Note: This is considerably easier to exploit if the attacker is on the same physical network.

Solution

Reconfigure the affected application, if possible to avoid the use of weak ciphers.

Risk Factor

Medium

CVSS v3.0 Base Score

5.3 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:L/I:N/A:N)

CVSS v2.0 Base Score

4.3 (CVSS2#AV:N/AC:M/Au:N/C:P/I:N/A:N)

Plugin Output

tcp/25/smtp

```
Here is the list of weak SSL ciphers supported by the remote server :

  Low Strength Ciphers (<= 64-bit key)

    Name                          Code              KEX          Auth     Encryption            MAC
    ----------------------        --------          ---          ----     --------------        ---
    EXP-RC2-CBC-MD5               0x04, 0x00, 0x80  RSA(512)     RSA      RC2-CBC(40)           MD5
       export
    EXP-RC4-MD5                   0x02, 0x00, 0x80  RSA(512)     RSA      RC4(40)               MD5
       export
    EXP-EDH-RSA-DES-CBC-SHA       0x00, 0x14        DH(512)      RSA      DES-CBC(40)
SHA1      export
    EDH-RSA-DES-CBC-SHA           0x00, 0x15        DH           RSA      DES-CBC(56)
SHA1
    EXP-ADH-DES-CBC-SHA           0x00, 0x19        DH(512)      None     DES-CBC(40)
SHA1      export
    EXP-ADH-RC4-MD5               0x00, 0x17        DH(512)      None     RC4(40)               MD5
       export
    ADH-DES-CBC-SHA               0x00, 0x1A        DH           None     DES-CBC(56)
SHA1
    EXP-DES-CBC-SHA               0x00, 0x08        RSA(512)     RSA      DES-CBC(40)
SHA1      export
    EXP-RC2-CBC-MD5               0x00, 0x06        RSA(512)     RSA      RC2-CBC(40)           MD5
       export
    EXP-RC4-MD5                   0x00, 0x03        RSA(512)     RSA      RC4(40)               MD5
       export
    DES-CBC-SHA                   0x00, 0x09        RSA          RSA      DES-CBC(56)
SHA1

The fields above are :

  {Tenable ciphername}
  {Cipher ID code}
  Kex={key exchange}
  Auth={authentication}
  Encrypt={symmetric encryption method}
  MAC={message authentication code}
  {export flag}
```

81606 - SSL/TLS EXPORT_RSA <= 512-bit Cipher Suites Supported (FREAK)

Synopsis

The remote host supports a set of weak ciphers.

Description

The remote host supports EXPORT_RSA cipher suites with keys less than or equal to 512 bits. An attacker can factor a 512-bit RSA modulus in a short amount of time.

A man-in-the middle attacker may be able to downgrade the session to use EXPORT_RSA cipher suites (e.g. CVE-2015-0204). Thus, it is recommended to remove support for weak cipher suites.

Solution

Reconfigure the service to remove support for EXPORT_RSA cipher suites.

Risk Factor

Medium

VPR Score

4.5

CVSS v2.0 Base Score

4.3 (CVSS2#AV:N/AC:M/Au:N/C:N/I:P/A:N)

CVSS v2.0 Temporal Score

3.2 (CVSS2#E:U/RL:OF/RC:C)

Plugin Output

tcp/25/smtp

```
EXPORT_RSA cipher suites supported by the remote server :

  Low Strength Ciphers (<= 64-bit key)

    Name                          Code              KEX          Auth     Encryption              MAC
    ----------------------        -------           --           ---      ----------------        --
    EXP-DES-CBC-SHA               0x00, 0x08        RSA(512)     RSA      DES-CBC(40)
 SHA1      export
    EXP-RC2-CBC-MD5               0x00, 0x06        RSA(512)     RSA      RC2-CBC(40)             MD5
       export
    EXP-RC4-MD5                   0x00, 0x03        RSA(512)     RSA      RC4(40)                 MD5
       export

The fields above are :

  {Tenable ciphername}
  {Cipher ID code}
  Kex={key exchange}
  Auth={authentication}
  Encrypt={symmetric encryption method}
  MAC={message authentication code}
  {export flag}
```

78479 - SSLv3 Padding Oracle On Downgraded Legacy Encryption Vulnerability (POODLE)

Synopsis

It is possible to obtain sensitive information from the remote host with SSL/TLS-enabled services.

Description

The remote host is affected by a man-in-the-middle (MitM) information disclosure vulnerability known as POODLE. The vulnerability is due to the way SSL 3.0 handles padding bytes when decrypting messages encrypted using block ciphers in cipher block chaining (CBC) mode.

MitM attackers can decrypt a selected byte of a cipher text in as few as 256 tries if they are able to force a victim application to repeatedly send the same data over newly created SSL 3.0 connections.

As long as a client and service both support SSLv3, a connection can be 'rolled back' to SSLv3, even if TLSv1 or newer is supported by the client and service.

The TLS Fallback SCSV mechanism prevents 'version rollback' attacks without impacting legacy clients; however, it can only protect connections when the client and service support the mechanism. Sites that cannot disable SSLv3 immediately should enable this mechanism.

This is a vulnerability in the SSLv3 specification, not in any particular SSL implementation. Disabling SSLv3 is the only way to completely mitigate the vulnerability.

Solution

Disable SSLv3.

Services that must support SSLv3 should enable the TLS Fallback SCSV mechanism until SSLv3 can be disabled.

Risk Factor

Medium

CVSS v3.0 Base Score

6.8 (CVSS:3.0/AV:N/AC:H/PR:N/UI:N/S:C/C:H/I:N/A:N)

CVSS v3.0 Temporal Score

5.9 (CVSS:3.0/E:U/RL:O/RC:C)

CVSS v2.0 Temporal Score

3.2 (CVSS2#E:U/RL:OF/RC:C)

Plugin Output

tcp/25/smtp

```
Nessus determined that the remote server supports SSLv3 with at least one CBC
cipher suite, indicating that this server is vulnerable.

It appears that TLSv1 or newer is supported on the server. However, the
Fallback SCSV mechanism is not supported, allowing connections to be "rolled
back" to SSLv3.
```

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CVSS v3.0 Temporal Score

5.9 (CVSS:3.0/E:U/RL:O/RC:C)

VPR Score

5.3

CVSS v2.0 Base Score

4.3 (CVSS2#AV:N/AC:M/Au:N/C:P/I:N/A:N)

CVSS v2.0 Temporal Score

3.2 (CVSS2#E:U/RL:OF/RC:C)

Plugin Output

tcp/5432/postgresql

```
Nessus determined that the remote server supports SSLv3 with at least one CBC
cipher suite, indicating that this server is vulnerable.

It appears that TLSv1 or newer is supported on the server. However, the
Fallback SCSV mechanism is not supported, allowing connections to be "rolled
back" to SSLv3.
```

104743 - TLS Version 1.0 Protocol Detection

Synopsis

The remote service encrypts traffic using an older version of TLS.

Description

The remote service accepts connections encrypted using TLS 1.0. TLS 1.0 has a number of cryptographic design flaws. Modern implementations of TLS 1.0 mitigate these problems, but newer versions of TLS like 1.2 and 1.3 are designed against these flaws and should be used whenever possible.

As of March 31, 2020, Endpoints that aren't enabled for TLS 1.2 and higher will no longer function properly with major web browsers and major vendors.

PCI DSS v3.2 requires that TLS 1.0 be disabled entirely by June 30, 2018, except for POS POI terminals (and the SSL/TLS termination points to which they connect) that can be verified as not being susceptible to any known exploits.

Solution

Enable support for TLS 1.2 and 1.3, and disable support for TLS 1.0.

Risk Factor

Medium

CVSS v3.0 Base Score

6.5 (CVSS:3.0/AV:N/AC:H/PR:N/UI:N/S:U/C:H/I:L/A:N)

CVSS v2.0 Base Score

6.1 (CVSS2#AV:N/AC:H/Au:N/C:C/I:P/A:N)

Plugin Output

tcp/25/smtp

```
TLSv1 is enabled and the server supports at least one cipher.
```

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Description

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Solution

Enable support for TLS 1.2 and 1.3, and disable support for TLS 1.0.

Risk Factor

Medium

CVSS v3.0 Base Score

6.5 (CVSS:3.0/AV:N/AC:H/PR:N/UI:N/S:U/C:H/I:L/A:N)

CVSS v2.0 Base Score

6.1 (CVSS2#AV:N/AC:H/Au:N/C:C/I:P/A:N)

Plugin Output

tcp/5432/postgresql

```
TLSv1 is enabled and the server supports at least one cipher.
```

42263 - Unencrypted Telnet Server

Synopsis

The remote Telnet server transmits traffic in cleartext.

Description

The remote host is running a Telnet server over an unencrypted channel.

Using Telnet over an unencrypted channel is not recommended as logins, passwords, and commands are transferred in cleartext. This allows a remote, man-in-the-middle attacker to eavesdrop on a Telnet session to obtain credentials or other sensitive information and to modify traffic exchanged between a client and server.

SSH is preferred over Telnet since it protects credentials from eavesdropping and can tunnel additional data streams such as an X11 session.

Solution

Disable the Telnet service and use SSH instead.

Risk Factor

Medium

CVSS v3.0 Base Score

6.5 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:L/I:L/A:N)

CVSS v2.0 Base Score

5.8 (CVSS2#AV:N/AC:M/Au:N/C:P/I:P/A:N)

Plugin Output

tcp/23/telnet

```
Nessus collected the following banner from the remote Telnet server :

---------------------- snip ----------------------
                                                                  ____
 _ _____  ___| |_ __  _____  __| | ____(_) |_ ___ | |___| | ___|_____\
| '_  ` _ \ / _ \ __/  ` / __| '_ \| |/ _ \| | __/ _` | '_ \| |/ _ \ __) |
| | | | | |  __/ || (_| \__ \ |_) | | (_) | | || (_| | |_) | |  __// __/
|_| |_| |_|\___|\__\__,_|___/ .__/|_|\___/|_|\__\__,_|_.__/|_|\___|_____|
                            |_|
Warning: Never expose this VM to an untrusted network!
```

```
Contact: msfdev[at]metasploit.com
Login with msfadmin/msfadmin to get started
metasploitable login:
---------------------- snip ----------------------
```

42263 - Unencrypted Telnet Server

Synopsis

The remote host supports a set of weak ciphers.

Description

The remote host supports EXPORT_DHE cipher suites with keys less than or equal to 512 bits. Through cryptanalysis, a third party can find the shared secret in a short amount of time.

A man-in-the middle attacker may be able to downgrade the session to use EXPORT_DHE cipher suites. Thus, it is recommended to remove support for weak cipher suites.

Solution

Reconfigure the service to remove support for EXPORT_DHE cipher suites.

Risk Factor

Low

CVSS v3.0 Base Score

3.7 (CVSS:3.0/AV:N/AC:H/PR:N/UI:N/S:U/C:N/I:L/A:N)

CVSS v3.0 Temporal Score

3.2 (CVSS:3.0/E:U/RL:O/RC:C)

VPR Score

4.5

CVSS v2.0 Base Score

2.6 (CVSS2#AV:N/AC:H/Au:N/C:N/I:P/A:N)

CVSS v2.0 Temporal Score

2.2 (CVSS2#E:U/RL:ND/RC:C)

Plugin Information

Published: 2015/05/21, Modified: 2022/12/05

Plugin Output

tcp/25/smtp

42263 - Unencrypted Telnet Server

Synopsis

The remote host supports a set of weak ciphers.

Description

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A man-in-the middle attacker may be able to downgrade the session to use EXPORT_DHE cipher suites. Thus, it is recommended to remove support for weak cipher suites.

Solution

Reconfigure the service to remove support for EXPORT_DHE cipher suites.

Risk Factor

Low

CVSS v3.0 Base Score

3.7 (CVSS:3.0/AV:N/AC:H/PR:N/UI:N/S:U/C:N/I:L/A:N)

CVSS v3.0 Temporal Score

3.2 (CVSS:3.0/E:U/RL:O/RC:C)

VPR Score

4.5

CVSS v2.0 Base Score

2.6 (CVSS2#AV:N/AC:H/Au:N/C:N/I:P/A:N)

CVSS v2.0 Temporal Score

2.2 (CVSS2#E:U/RL:ND/RC:C)

Plugin Information

Published: 2015/05/21, Modified: 2022/12/05

Plugin Output

tcp/25/smtp

```
EXPORT_DHE cipher suites supported by the remote server :

  Low Strength Ciphers (<= 64-bit key)
```

Name	Code	KEX	Auth	Encryption	MAC
EXP-EDH-RSA-DES-CBC-SHA	0x00, 0x14	DH(512)	RSA	DES-CBC(40)	
SHA1 export					
EXP-ADH-DES-CBC-SHA	0x00, 0x19	DH(512)	None	DES-CBC(40)	
SHA1 export					
EXP-ADH-RC4-MD5	0x00, 0x17	DH(512)	None	RC4(40)	MD5

10407 - X Server Detection

Synopsis

An X11 server is listening on the remote host

Description

The remote host is running an X11 server. X11 is a client-server protocol that can be used to display graphical applications running on a given host on a remote client.

Since the X11 traffic is not ciphered, it is possible for an attacker to eavesdrop on the connection.

Solution

Restrict access to this port. If the X11 client/server facility is not used, disable TCP support in X11 entirely (-nolisten tcp).

Risk Factor

Low

CVSS v2.0 Base Score

2.6 (CVSS2#AV:N/AC:H/Au:N/C:P/I:N/A:N)

Plugin Output

tcp/6000/x11

```
X11 Version : 11.0
```