

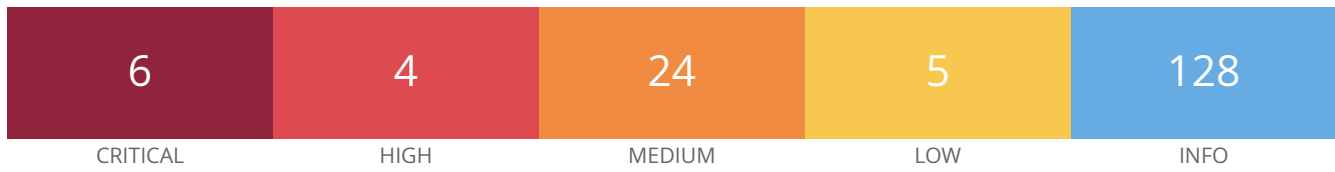


meta prova 2

Report generated by Nessus™

Sun, 04 Jun 2023 16:26:44 CEST

192.168.50.101



Scan Information

Start time: Sun Jun 4 15:59:54 2023
End time: Sun Jun 4 16:26:44 2023

Host Information

Netbios Name: METASPLOITABLE
IP: 192.168.50.101
MAC Address: 3E:CB:D0:E6:8F:C9
OS: Linux Kernel 2.6 on Ubuntu 8.04 (hardy)

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).

See Also

<http://www.nessus.org/u?8ebe6246>
<http://www.nessus.org/u?4e287adb>
<http://www.nessus.org/u?cbc3d54e>
<https://access.redhat.com/security/cve/CVE-2020-1745>
<https://access.redhat.com/solutions/4851251>
<http://www.nessus.org/u?dd218234>
<http://www.nessus.org/u?dd772531>

<http://www.nessus.org/u?2a01d6bf>
<http://www.nessus.org/u?3b5af27e>
<http://www.nessus.org/u?9dab109f>
<http://www.nessus.org/u?5eafcf70>

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)

References

| | |
|------|---------------------------------|
| CVE | CVE-2020-1745 |
| CVE | CVE-2020-1938 |
| XREF | CISA-KNOWN-EXPLOITED:2022/03/17 |
| XREF | CEA-ID:CEA-2020-0021 |

Plugin Information

Published: 2020/03/24, Modified: 2023/05/24

Plugin Output

tcp/8009/ajp13

192.168.50.101

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 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...l.....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...l....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 (limite [...])

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.

See Also

<http://www.nessus.org/u?107f9bdc>

<http://www.nessus.org/u?f14f4224>

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)

References

| | |
|------|---------------|
| BID | 29179 |
| CVE | CVE-2008-0166 |
| XREF | CWE:310 |

Exploitable With

Core Impact (true)

Plugin Information

Published: 2008/05/15, Modified: 2020/11/16

Plugin Output

tcp/25/smtp

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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.

See Also

<http://www.nessus.org/u?107f9bdc>

<http://www.nessus.org/u?f14f4224>

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)

References

| | |
|------|---------------|
| BID | 29179 |
| CVE | CVE-2008-0166 |
| XREF | CWE:310 |

Exploitable With

Core Impact (true)

Plugin Information

Published: 2008/05/15, Modified: 2020/11/16

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'.

See Also

<https://www.schneier.com/academic/paperfiles/paper-ssl.pdf>

<http://www.nessus.org/u?b06c7e95>

<http://www.nessus.org/u?247c4540>

<https://www.openssl.org/~bodo/ssl-poodle.pdf>

<http://www.nessus.org/u?5d15ba70>

<https://www.imperialviolet.org/2014/10/14/poodle.html>

<https://tools.ietf.org/html/rfc7507>

<https://tools.ietf.org/html/rfc7568>

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 Information

Published: 2005/10/12, Modified: 2022/04/04

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 export | | RSA(512) | RSA | RC2-CBC(40) | MD5 |
| EXP-RC4-MD5 export | | RSA(512) | RSA | RC4(40) | MD5 |

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 SHA1 export | | DH(512) | RSA | DES-CBC(40) | |
| 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'.

See Also

<https://www.schneier.com/academic/paperfiles/paper-ssl.pdf>

<http://www.nessus.org/u?b06c7e95>

<http://www.nessus.org/u?247c4540>

<https://www.openssl.org/~bodo/ssl-poodle.pdf>

<http://www.nessus.org/u?5d15ba70>

<https://www.imperialviolet.org/2014/10/14/poodle.html>

<https://tools.ietf.org/html/rfc7507>

<https://tools.ietf.org/html/rfc7568>

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 Information

Published: 2005/10/12, Modified: 2022/04/04

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)

References

| | |
|------|------------------|
| XREF | IAVA:0001-A-0502 |
| XREF | IAVA:0001-A-0648 |

Plugin Information

Published: 2008/08/08, Modified: 2023/05/18

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.

See Also

<https://kb.isc.org/docs/cve-2020-8616>

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

I

References

| | |
|------|--------------------|
| CVE | CVE-2020-8616 |
| XREF | IAVA:2020-A-0217-S |

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.

See Also

<https://www.openssl.org/blog/blog/2016/08/24/sweet32/>

<https://sweet32.info>

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 Information

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

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

See Also

<https://www.openssl.org/blog/blog/2016/08/24/sweet32/>

<https://sweet32.info>

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 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 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.

See Also

<http://badlock.org>

<https://www.samba.org/samba/security/CVE-2016-2118.html>

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 |
| CVE | CVE-2016-2118 |
| XREF | CERT:813296 |

Plugin Information

Published: 2016/04/13, Modified: 2019/11/20

Plugin Output

tcp/445/cifs

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