

Metasploitable Machine

Report generated by Tenable Nessus $^{\!\top\!\!}$

Tue, 30 Jul 2024 18:47:48 CDT

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Vulnerabilities by Host	
• 192.168.86.37	4



192.168.86.37

11	7	26	9	0
CRITICAL	HIGH	MEDIUM	LOW	INFO

Host Information

Netbios Name: METASPLOITABLE
IP: 192.168.86.37
MAC Address: BC:24:11:26:D9:37

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

Sol	lution
20	uuuui

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

EPSS Score

0.9728

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: 2024/07/17

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.../
         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 0x0070: A0 08 00 01 30 00 00 0F 41 63 63 65 70 74 2D 45
                                                                .en-US, en; q=0.5.
                                                                  ....O...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 0x00C0: 7A 69 6C 6C 61 00 00 19 55 70 67 72 61 64 65 2D
                                                                 max-age=0....Mo
                                                                  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 0x0120: 73 74 5F 75 72 69 00 00 01 31 00 0A 00 1F 6A 61
                                                                  et.include.reque
                                                                  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 0x0170: 74 2E 69 6E 63 6C 75 64 65 2E 73 65 72 76 6C 65
                                                                  ..."javax.servle
                                                                  t.include.servle
0x0180: 74 5F 70 61 74 68 00 00 00 00 FF
                                                                  t_path....
This produced the following truncated output (limite [...]
```

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

Synopsis

An unsupported version of Apache Tomcat is installed on the remote host.

Description

According to its version, Apache Tomcat is less than or equal to 5.5.x. It is, therefore, no 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.

See Also

https://tomcat.apache.org/tomcat-55-eol.html

Solution

Upgrade to a version of Apache Tomcat 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 Information

Published: 2023/02/10, Modified: 2024/05/06

Plugin Output

tcp/8180/www

```
URL : http://192.168.86.37:8180/
Installed version : 5.5
Security End of Life : September 30, 2012
Time since Security End of Life (Est.) : >= 11 years
```

51988 - Bind Shell Backdoor Detection

Synopsis

The remote host may have been compromised.

Description

A shell is listening on the remote port without any authentication being required. An attacker may use it by connecting to the remote port and sending commands directly.

Solution

Verify if the remote host has been compromised, and reinstall the system if necessary.

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: 2011/02/15, Modified: 2022/04/11

Plugin Output

tcp/1524/wild_shell

32314 - Debian OpenSSH/OpenSSL Package Random Number Generator Weakness

Synopsis
The remote SSH host keys are weak.
Description
The remote SSH host key 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 set up 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 particuliar, all SSH, SSL and OpenVPN key material should be re-generated.
Risk Factor
Critical
VPR Score
5.1
EPSS Score
0.0817
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: 2008/05/14, Modified: 2024/07/24

Plugin Output

tcp/22/ssh

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 particuliar, all SSH, SSL and OpenVPN key material should be re-generated.
Risk Factor
Critical
VPR Score
5.1
EPSS Score
0.0817
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

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 particuliar, all SSH, SSL and OpenVPN key material should be re-generated.
Risk Factor
Critical
VPR Score
5.1
EPSS Score
0.0817
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

11356 - NFS Exported Share Information Disclosure

Synopsis
It is possible to access NFS shares on the remote host.
Description
At least one of the NFS shares exported by the remote server could be mounted by the scanning host. An attacker may be able to leverage this to read (and possibly write) files on remote host.
Solution
Configure NFS on the remote host so that only authorized hosts can mount its remote shares.
Risk Factor
Critical
VPR Score
5.9
EPSS Score
0.015
CVSS v2.0 Base Score
10.0 (CVSS2#AV:N/AC:L/Au:N/C:C/I:C/A:C)
References
CVE CVE-1999-0170
CVE CVE-1999-0211
CVE CVE-1999-0554
Exploitable With
Metasploit (true)
Plugin Information
Published: 2003/03/12, Modified: 2023/08/30
Plugin Output
udp/2049/rpc-nfs

```
The following NFS shares could be mounted :
 + Contents of / :
   - .
- ..
- bin
- boot
    - cdrom
    - dev
    - etc
    - home
- initrd
- initrd.img
    - lib
    - lost+found
    - media
    - mnt
- nohup.out
- opt
    - proc
    - root
    - sbin
- srv
- sys
- tmp
    - usr
    - var
    - vmlinuz
```

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

	rver supports at l	east one cipner	£ •		
Low Strength Ciphers (<= 64	-bit key)				
Name	Code	KEX	Auth	Encryption	M
EXP-RC2-CBC-MD5 export		RSA(512)	RSA	RC2-CBC(40)	I.
EXP-RC4-MD5 export		RSA(512)	RSA	RC4(40)	M
Medium Strength Ciphers (> 6	64-bit and < 112-b	it key, or 3DES	3)		
Name	Code	KEX	Auth	Encryption	
DES-CBC3-MD5		RSA		3DES-CBC(168)	N
High Strength Ciphers (>= 1	12-bit key)				
Name	Code	KEX	Auth	Encryption	_ I
RC4-MD5		RSA	RSA	RC4 (128)	- I
e fields above are :					
{Tenable ciphername} {Cipher ID code} Kex={key exchange}					
Auth={authentication} Encrypt={symmetric encryptic MAC={message authentication {export flag}	code}				
<pre>Encrypt={symmetric encryptic MAC={message authentication</pre>	rver supports at l				
Encrypt={symmetric encryption MAC={message authentication {export flag} SSLv3 is enabled and the semplanation: TLS 1.0 and SSL 3	rver supports at log. 3.0 cipher suites n				
Encrypt={symmetric encryption MAC={message authentication {export flag} SSLv3 is enabled and the sent explanation: TLS 1.0 and SSL 3 Low Strength Ciphers (<= 64-1)	rver supports at log 3.0 cipher suites not be suited by the suite of the suite of the support of	may be used wit	th SSLv3 Auth		
Encrypt={symmetric encryption MAC={message authentication {export flag} SSLv3 is enabled and the semplanation: TLS 1.0 and SSL 3 Low Strength Ciphers (<= 64	rver supports at log 3.0 cipher suites not be a cipher suites not be a cipher suites not be a cipher suite.	may be used wit	th SSLv3	Encryption DES-CBC(40)	<u>M</u>

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
                                                            RSA
                                                                     3DES-CBC(168)
   DES-CBC3-SHA
                                                            RSA 3DES-CBC(168)
                                                RSA
 High Strength Ciphers (>= 112-bit key)
                                                            Auth Encryption
   Name
                               Code
                                               KEX
                                                                                           MAC
   DHE-RSA-AES128-SHA
                                                            RSA
                                                                    AES-CBC(128)
                                                DH
   DHE-RSA-AES256-SHA
                                                DH
                                                            RSA AES-CBC(256)
  AES128-SHA
                                                RSA
                                                            RSA AES-CBC(128)
 SHA1
                                                            RSA
                                                                    AES-CBC(256)
   AES256-SHA
                                                RSA
                                                             RSA
                                                                    RC4 (128)
   RC4 - SHA
                                                RSA
 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}
```

46882 - UnrealIRCd Backdoor Detection

Synopsis	
The remote	e IRC server contains a backdoor.
Description	n
	e IRC server is a version of UnrealIRCd with a backdoor that allows an attacker to execute ode on the affected host.
See Also	
https://sec	lists.org/fulldisclosure/2010/Jun/277
https://sec	lists.org/fulldisclosure/2010/Jun/284
http://wwv	unrealircd.com/txt/unrealsecadvisory.20100612.txt
Solution	
Re-downlo	ad the software, verify it using the published MD5 / SHA1 checksums, and re-install it.
Risk Factor	
Critical	
VPR Score	
7.4	
EPSS Score	
0.6495	
CVSS v2.0	Base Score
10.0 (CVSS	2#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	40820
CVE	CVE-2010-2075
Exploitable	. With

CANVAS (true) Metasploit (true)

Plugin Information

Published: 2010/06/14, Modified: 2022/04/11

Plugin Output

tcp/6667/irc

```
The remote IRC server is running as : uid=0(root) gid=0(root)
```

61708 - VNC Server 'password' Password

Synopsis

A VNC server running on the remote host is secured with a weak password.

Description

The VNC server running on the remote host is secured with a weak password. Nessus was able to login using VNC authentication and a password of 'password'. A remote, unauthenticated attacker could exploit this to take control of the system.

Solution

Secure the VNC service with a strong password.

Risk Factor

Critical

CVSS v2.0 Base Score

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

Plugin Information

Published: 2012/08/29, Modified: 2015/09/24

Plugin Output

tcp/5900/vnc

Nessus logged in using a password of "password".

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
7.7 (CVSS:3.0/E:P/RL:O/RC:C)
VPR Score
5.2
EPSS Score
0.0234
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

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

STIG Severity

ı

References

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

Plugin Information

Published: 2020/05/22, Modified: 2024/03/12

Plugin Output

udp/53/dns

Installed version : 9.4.2
Fixed version : 9.11.19

42256 - NFS Shares World Readable

Synopsis

The remote NFS server exports world-readable shares.

Description

The remote NFS server is exporting one or more shares without restricting access (based on hostname, IP, or IP range).

See Also

http://www.tldp.org/HOWTO/NFS-HOWTO/security.html

Solution

Place the appropriate restrictions on all NFS shares.

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)

CVSS v2.0 Base Score

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

Plugin Information

Published: 2009/10/26, Modified: 2024/02/21

Plugin Output

tcp/2049/rpc-nfs

```
The following shares have no access restrictions :  \begin{tabular}{ll} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &
```

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
5.1
EPSS Score
0.0053
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

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

Plugin Output

tcp/25/smtp

Name	Code		KEX	Auth	Encryption	MA
DES-CBC3-MD5		0x00,		RSA	3DES-CBC(168)	MI
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						
<pre>Te fields above are : {Tenable ciphername} {Cipher ID code} Kex={key exchange} Auth={authentication} Encrypt={symmetric encryptimac={message authentication} {export flag}</pre>						

42873 - SSL Medium Strength Cipher Suites Supported (SWEET32)

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ote that it is considerably easier to circumvent medium strength encryption if the attacker is on the same hysical network.
ee Also
ttps://www.openssl.org/blog/blog/2016/08/24/sweet32/ ttps://sweet32.info
olution
econfigure the affected application if possible to avoid use of medium strength ciphers.
isk Factor
ledium
VSS v3.0 Base Score
.5 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:N/A:N)
PR Score
.1
PSS Score
.0053
VSS v2.0 Base Score
.0 (CVSS2#AV:N/AC:L/Au:N/C:P/I:N/A:N)
eferences
VE 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)
                                                   Auth Encryption MAC
RSA 3DES-CBC(168)
                             Code
  Name
                                                                                    MAC
   -----
                            0x00, 0x16
   EDH-RSA-DES-CBC3-SHA
                                           DH
                                                       RSA
                            0x00, 0x0A
                                                              3DES-CBC(168)
   DES-CBC3-SHA
                                           RSA
 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

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

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. 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** 5.9 **FPSS Score** 0.0323 CVSS v2.0 Base Score

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.

10205 - rlogin Service Detection

Metasploit (true)

Plugin Information

Published: 1999/08/30, Modified: 2022/04/11

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** 5.9 **EPSS Score** 0.015 CVSS v2.0 Base Score 7.5 (CVSS2#AV:N/AC:L/Au:N/C:P/I:P/A:P) References CVE CVE-1999-0651 **Exploitable With**

Ρl	ugin	Outp	ut

tcp/513/rlogin

10245 - rsh Service Detection

Synopsis

The rsh service is running on the remote host.

Published: 1999/08/22, Modified: 2022/04/11

Description

The rsh service is running on the remote host. This service is vulnerable since data is passed between the rsh 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, rsh is an easy way to turn file-write access into full logins through the .rhosts or rhosts.equiv files.

Solution

Comment out the 'rsh' line in /etc/inetd.conf and restart the inetd process. Alternatively, disable this service and use SSH instead.
Risk Factor
High
VPR Score
5.9
EPSS Score
0.015
CVSS v2.0 Base Score
7.5 (CVSS2#AV:N/AC:L/Au:N/C:P/I:P/A:P)
References
CVE CVE-1999-0651
Exploitable With
Metasploit (true)
Plugin Information

Plugin Outpu	PΙ	ugin	Outi	ou1
--------------	----	------	------	-----

tcp/514/rsh

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.

See Also

http://www.nessus.org/u?4cb3b4dd

https://www.owasp.org/index.php/Securing_tomcat

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 Information

Published: 2004/03/02, Modified: 2019/08/12

Plugin Output

tcp/8180/www

The following default files were found :

http://192.168.86.37:8180/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.

12217 - DNS Server Cache Snooping Remote Information Disclosure

Synopsis

The remote DNS server is vulnerable to cache snooping attacks.

Description

The remote DNS server responds to queries for third-party domains that do not have the recursion bit set.

This may allow a remote attacker to determine which domains have recently been resolved via this name server, and therefore which hosts have been recently visited.

For instance, if an attacker was interested in whether your company utilizes the online services of a particular financial institution, they would be able to use this attack to build a statistical model regarding company usage of that financial institution. Of course, the attack can also be used to find B2B partners, web-surfing patterns, external mail servers, and more.

Note: If this is an internal DNS server not accessible to outside networks, attacks would be limited to the internal network. This may include employees, consultants and potentially users on a guest network or WiFi connection if supported.

See Also

http://cs.unc.edu/~fabian/course_papers/cache_snooping.pdf

Solution

Contact the vendor of the DNS software for a fix.

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 Information

Published: 2004/04/27, Modified: 2020/04/07

Plugin Output

udp/53/dns

Nessus sent a non-recursive query for example.edu and received 1 answer :

93.184.215.14

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 method that are used to debug web server connections.
See Also
http://www.nessus.org/u?e979b5cb
http://www.apacheweek.com/issues/03-01-24
https://download.oracle.com/sunalerts/1000718.1.html
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
EPSS Score
0.0465
CVSS v2.0 Base Score
5.0 (CVSS2#AV:N/AC:L/Au:N/C:P/I:N/A:N)
CVSS v2.0 Temporal Score
3.7 (CVSS2#E:U/RL:OF/RC:C)
400 400 07 07

References

BID	9506
BID	9561
BID	11604
BID	33374
BID	37995
CVE	CVE-2003-1567
CVE	CVE-2004-2320
CVE	CVE-2010-0386
XREF	CERT:288308
XREF	CERT:867593
XREF	CWE:16
XREF	CWE:200

Plugin Information

Published: 2003/01/23, Modified: 2024/04/09

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 : \n\n
 -----\nTRACE /Nessus879887645.html HTTP/1.1
Connection: Close
Host: 192.168.86.37
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/ppeg, image/png, */*
Accept-Language: en
Accept-Charset: iso-8859-1,*,utf-8
-----\n\nand received the
following response from the remote server :\n\n----- snip
 -----\nHTTP/1.1 200 OK
Date: Tue, 30 Jul 2024 23:43:06 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 /Nessus879887645.html HTTP/1.1
Connection: Keep-Alive
```

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.
See Also
https://kb.isc.org/docs/cve-2020-8622
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
EPSS Score
0.0041
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

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

STIG Severity

ı

References

CVE CVE-2020-8622 XREF IAVA:2020-A-0385-S

Plugin Information

Published: 2020/08/27, Modified: 2021/06/03

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. See Also https://kb.isc.org/docs/cve-2020-8617 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** 4.4 **EPSS Score** 0.9727 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

1

References

CVE CVE-2020-8617 XREF IAVA:2020-A-0217-S

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

33447 - Multiple Vendor DNS Query ID Field Prediction Cache Poisoning

Synopsis
The remote name resolver (or the server it uses upstream) is affected by a DNS cache poisoning vulnerability.
Description
The remote DNS resolver does not use random ports when making queries to third-party DNS servers. An unauthenticated, remote attacker can exploit this to poison the remote DNS server, allowing the attacker to divert legitimate traffic to arbitrary sites.
See Also
https://www.cnet.com/news/massive-coordinated-dns-patch-released/
https://www.theregister.co.uk/2008/07/21/dns_flaw_speculation/
Solution
Contact your DNS server vendor for a patch.
Risk Factor
Medium
CVSS v3.0 Base Score
6.8 (CVSS:3.0/AV:N/AC:H/PR:N/UI:N/S:C/C:N/I:H/A:N)
CVSS v3.0 Temporal Score
6.1 (CVSS:3.0/E:P/RL:O/RC:C)
VPR Score
6.0
EPSS Score
0.1218
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

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

STIG Severity

ı

References

BID 30131

CVE CVE-2008-1447

XREF CERT:800113

XREF IAVA:2008-A-0045

XREF EDB-ID:6122

XREF EDB-ID:6123

XREF EDB-ID:6130

Plugin Information

Published: 2008/07/09, Modified: 2024/04/03

Plugin Output

udp/53/dns

```
The remote DNS server uses non-random ports for its DNS requests. An attacker may spoof DNS responses.

List of used ports:

+ DNS Server: 70.119.104.19

|- Port: 54620
|- Port: 54620
|- Port: 54620
|- Port: 54620
```

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.

See Also

http://www.nessus.org/u?df39b8b3

http://technet.microsoft.com/en-us/library/cc731957.aspx

http://www.nessus.org/u?74b80723

https://www.samba.org/samba/docs/current/man-html/smb.conf.5.html

http://www.nessus.org/u?a3cac4ea

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 Information

Published: 2012/01/19, Modified: 2022/10/05

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. See Also https://tools.ietf.org/html/rfc2487 https://www.securityfocus.com/archive/1/516901/30/0/threaded Solution Contact the vendor to see if an update is available. Risk Factor Medium **VPR** Score 6.3 **EPSS Score** 0.0114 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 3.1 (CVSS2#E:POC/RL:OF/RC:C) References BID 46767

```
CVE CVE-2011-0411
CVE CVE-2011-1430
CVE CVE-2011-1431
CVE CVE-2011-1432
CVE CVE-2011-1506
CVE CVE-2011-2165
XREF CERT:555316
```

Plugin Information

Published: 2011/03/10, Modified: 2019/03/06

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
```

90317 - SSH Weak Algorithms Supported

Synopsis

The remote SSH server is configured to allow weak encryption algorithms or no algorithm at all.

Description

Nessus has detected that the remote SSH server is configured to use the Arcfour stream cipher or no cipher at all. RFC 4253 advises against using Arcfour due to an issue with weak keys.

See Also

https://tools.ietf.org/html/rfc4253#section-6.3

Solution

Contact the vendor or consult product documentation to remove the weak ciphers.

Risk Factor

Medium

CVSS v2.0 Base Score

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

Plugin Information

Published: 2016/04/04, Modified: 2016/12/14

Plugin Output

tcp/22/ssh

```
The following weak server-to-client encryption algorithms are supported:

arcfour
arcfour128
arcfour256

The following weak client-to-server encryption algorithms are supported:

arcfour
arcfour128
arcfour128
arcfour256
```

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. See Also http://www.nessus.org/u?3a040ada 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 4.4 **FPSS Score** 0.0031 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

CVE CVE-2007-1858

Plugin Information

Published: 2008/03/28, Modified: 2023/10/27

Plugin Output

tcp/25/smtp

Low Strength Ciphers (<= 64	-bit key)				
Name	Code	KEX	Auth	Encryption	M
EXP-ADH-DES-CBC-SHA SHA1 export	0x00, 0x19	DH(512)	None	DES-CBC(40)	
EXP-ADH-RC4-MD5 export	0x00, 0x17	DH(512)	None	RC4 (40)	M
ADH-DES-CBC-SHA SHA1	0x00, 0x1A	DH	None	DES-CBC(56)	
Medium Strength Ciphers (>	64-bit and < 112-b	it key, or 3DE	S)		
Name	Code	KEX	Auth	Encryption	M
ADH-DES-CBC3-SHA HA1	0x00, 0x1B	DH	None	3DES-CBC(168)	
High Strength Ciphers (>= 1	12-bit key)				
Name	Code	KEX	Auth	Encryption	M
ADH-AES128-SHA	0x00, 0x34	DH	None	AES-CBC(128)	-
SHA1 ADH-AES256-SHA SHA1	0x00, 0x3A	DH	None	AES-CBC(256)	
ADH-RC4-MD5	0x00, 0x18	DH	None	RC4 (128)	M
ne fields above are :					
{Tenable ciphername} {Cipher ID code}					
<pre>Kex={key exchange} Auth={authentication}</pre>					
<pre>Encrypt={symmetric encrypti MAC={message authentication</pre>					

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.

See Also

https://www.itu.int/rec/T-REC-X.509/en

https://en.wikipedia.org/wiki/X.509

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)

Published: 2010/12/15, Modified: 2020/04/27

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/0=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/0=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/0=OCOSA/OU=Office for Complication of Otherwise Simple Affairs/CN=ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain
```

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.

See Also

https://www.itu.int/rec/T-REC-X.509/en

https://en.wikipedia.org/wiki/X.509

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)

Published: 2010/12/15, Modified: 2020/04/27

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/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-base.localdomain/E=root@ubuntu804-
```

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 Information

Published: 2004/12/03, Modified: 2021/02/03

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 Information

Published: 2004/12/03, Modified: 2021/02/03

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 Information

Published: 2010/04/03, Modified: 2020/04/27

Plugin Output

tcp/25/smtp

```
The identities known by Nessus are:

192.168.86.37
192.168.86.37

The Common Name in the certificate is:

ubuntu804-base.localdomain
```

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 Information

Published: 2010/04/03, Modified: 2020/04/27

Plugin Output

tcp/5432/postgresql

```
The identities known by Nessus are:

192.168.86.37
192.168.86.37

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 crossprotocol 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. See Also https://drownattack.com/ https://drownattack.com/drown-attack-paper.pdf 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 **EPSS Score** 0.9524 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)

References

BID 83733

CVE CVE-2016-0800 **XREF** CERT:583776

Plugin Information

Published: 2016/03/01, Modified: 2019/11/20

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 export	0x04, 0x00, 0x80	RSA(512)	RSA	RC2-CBC(40)	MD5
EXP-RC4-MD5 export	0x02, 0x00, 0x80	RSA(512)	RSA	RC4 (40)	MD5

High Strength Ciphers (>= 112-bit key)

Name	Code	KEX	Auth	Encryption	MAC
RC4-MD5	0×01 , 0×00 , 0×80	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.

See Also

https://www.rc4nomore.com/

http://www.nessus.org/u?ac7327a0

http://cr.yp.to/talks/2013.03.12/slides.pdf

http://www.isg.rhul.ac.uk/tls/

https://www.imperva.com/docs/HII_Attacking_SSL_when_using_RC4.pdf

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

4.4

EPSS Score

0.0054

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

CVSS v2.0 Temporal Score

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

References

BID 58796 BID 73684

CVE CVE-2013-2566 CVE CVE-2015-2808

Plugin Information

Published: 2013/04/05, Modified: 2021/02/03

Plugin Output

tcp/25/smtp

```
List of RC4 cipher suites supported by the remote server :
 Low Strength Ciphers (<= 64-bit key)
                                               KEX
                                                             Auth Encryption
   Name
                                                                                             MAC
                                                              - - - -
                                0x02, 0x00, 0x80 RSA(512)
   EXP-RC4-MD5
                                                             RSA
                                                                     RC4(40)
                                                                                             MD5
      export
                               0x00, 0x17
   EXP-ADH-RC4-MD5
                                                DH(512)
                                                              None
                                                                      RC4(40)
                                                                                             MD5
     export
   EXP-RC4-MD5
                                0x00, 0x03
                                                RSA(512)
                                                              RSA
                                                                     RC4(40)
                                                                                             MD5
 High Strength Ciphers (>= 112-bit key)
                                                             Auth Encryption
                                0x01, 0x00, 0x80 RSA
                                                                     RC4 (128)
   RC4 - MD5
                                                             RSA
                                                                                             MD5
                                                             None
                                0x00, 0x18 DH
0x00, 0x04 RSA
   ADH-RC4-MD5
                                                                      RC4 (128)
   RC4-MD5
                                                 RSA
                                                              RSA
                                                                      RC4 (128)
                                                                                             MD5
                                                             RSA RC4 (128)
RSA RC4 (128)
                                0x00, 0x05
   RC4 - SHA
                                                RSA
 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.

See Also

https://www.rc4nomore.com/

http://www.nessus.org/u?ac7327a0

http://cr.yp.to/talks/2013.03.12/slides.pdf

http://www.isg.rhul.ac.uk/tls/

https://www.imperva.com/docs/HII_Attacking_SSL_when_using_RC4.pdf

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

4.4

EPSS Score

0.0054

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

CVSS v2.0 Temporal Score

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

References

BID 58796 BID 73684

CVE CVE-2013-2566 CVE CVE-2015-2808

Plugin Information

Published: 2013/04/05, Modified: 2021/02/03

Plugin Output

tcp/5432/postgresql

```
List of RC4 cipher suites supported by the remote server :
 High Strength Ciphers (>= 112-bit key)
   Name
                                               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 Information

Published: 2012/01/17, Modified: 2022/06/14

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:

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

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 Information

Published: 2012/01/17, Modified: 2022/06/14

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:

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

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.

See Also

http://www.nessus.org/u?6527892d

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)

References

XREF	CWE:326
XREF	CWE:327
XREF	CWE:720
XREF	CWE:753
XREF	CWE:803
XREF	CWE:928
XREF	CWE:934

Plugin Information

Published: 2007/10/08, Modified: 2021/02/03

Plugin Output

tcp/25/smtp

Low Strength Ciphers (<= 64-k	oit key)						
Name	Code			KEX	Auth	Encryption	N
EXP-RC2-CBC-MD5 export				RSA(512)			I.
EXP-RC4-MD5 export	0x02,	0x00,	0x80	RSA(512)	RSA	RC4 (40)	I
EXP-EDH-RSA-DES-CBC-SHA HA1 export	0x00,	0x14		DH(512)	RSA	DES-CBC(40)	
EDH-RSA-DES-CBC-SHA HA1	0x00,	0x15		DH	RSA	DES-CBC(56)	
EXP-ADH-DES-CBC-SHA HA1 export	0x00,	0x19		DH(512)	None	DES-CBC(40)	
EXP-ADH-RC4-MD5 export	0x00,	0x17		DH(512)	None	RC4 (40)	I
ADH-DES-CBC-SHA HA1	0x00,	0x1A		DH	None	DES-CBC(56)	
EXP-DES-CBC-SHA HA1 export	0x00,	0x08		RSA(512)	RSA	DES-CBC(40)	
EXP-RC2-CBC-MD5 export	0x00,	0x06		RSA(512)	RSA	RC2-CBC(40)	I
EXP-RC4-MD5 export	0x00,	0x03		RSA(512)	RSA	RC4 (40)	I
DES-CBC-SHA HA1	0x00,	0x09		RSA	RSA	DES-CBC(56)	
e fields above are :							
{Tenable ciphername} {Cipher ID code} Kex={key exchange} Auth={authentication}							

192.168.86.37 74

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. See Also https://www.smacktls.com/#freak https://www.openssl.org/news/secadv/20150108.txt http://www.nessus.org/u?b78da2c4 Solution Reconfigure the service to remove support for EXPORT_RSA cipher suites. Risk Factor Medium **VPR** Score 3.7 **EPSS Score** 0.9483 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) References BID 71936 CVF CVE-2015-0204

XREF CERT:243585

Plugin Information

Published: 2015/03/04, Modified: 2021/02/03

Plugin Output

tcp/25/smtp

```
EXPORT_RSA cipher suites supported by the remote server :
 Low Strength Ciphers (<= 64-bit key)
                                           KEX
                                                      Auth Encryption
RSA DES-CBC(40)
                           0x00, 0x08
                                            - - -
  EXP-DES-CBC-SHA
                                          RSA(512)
SHA1 export
  EXP-RC2-CBC-MD5 0x00, 0x06
                                                        RSA RC2-CBC(40)
                                            RSA(512)
                                                                                    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}
```

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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.

See Also

https://tools.ietf.org/html/draft-ietf-tls-oldversions-deprecate-00

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)

References

XREF CWE:327

Plugin Information

Published: 2017/11/22, Modified: 2023/04/19

Plugin Output

tcp/25/smtp

 $\ensuremath{\operatorname{TLSv1}}$ is enabled and the server supports at least one cipher.

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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.

See Also

https://tools.ietf.org/html/draft-ietf-tls-oldversions-deprecate-00

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)

References

XREF CWE:327

Plugin Information

Published: 2017/11/22, Modified: 2023/04/19

Plugin Output

tcp/5432/postgresql

 $\ensuremath{\operatorname{TLSv1}}$ 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

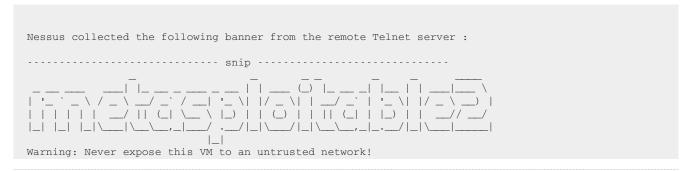
5.8 (CVSS2#AV:N/AC:M/Au:N/C:P/I:P/A:N)

Plugin Information

Published: 2009/10/27, Modified: 2024/01/16

Plugin Output

tcp/23/telnet



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

10114 - ICMP Timestamp Request Remote Date Disclosure

Synopsis It is possible to determine the exact time set on the remote host. Description The remote host answers to an ICMP timestamp request. This allows an attacker to know the date that is set on the targeted machine, which may assist an unauthenticated, remote attacker in defeating timebased authentication protocols. Timestamps returned from machines running Windows Vista / 7 / 2008 / 2008 R2 are deliberately incorrect, but usually within 1000 seconds of the actual system time. Solution Filter out the ICMP timestamp requests (13), and the outgoing ICMP timestamp replies (14). Risk Factor Low **VPR** Score 4.2 **EPSS Score** 0.8808 CVSS v2.0 Base Score 2.1 (CVSS2#AV:L/AC:L/Au:N/C:P/I:N/A:N) References CVE CVE-1999-0524 XRFF CWF:200 Plugin Information Published: 1999/08/01, Modified: 2024/05/03 Plugin Output

192.168.86.37

icmp/0

The difference between the local and remote clocks is 6 seconds.

70658 - SSH Server CBC Mode Ciphers Enabled

Synopsis

The SSH server is configured to use Cipher Block Chaining.

Description

The SSH server is configured to support Cipher Block Chaining (CBC) encryption. This may allow an attacker to recover the plaintext message from the ciphertext.

Note that this plugin only checks for the options of the SSH server and does not check for vulnerable software versions.

Solution

Contact the vendor or consult product documentation to disable CBC mode cipher encryption, and enable CTR or GCM cipher mode encryption.

Risk Factor

Low

CVSS v3.0 Base Score

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

VPR Score

3.6

EPSS Score

0.1227

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 32319

CVE CVE-2008-5161

XREF CERT:958563

XREF CWE:200

Published: 2013/10/28, Modified: 2023/10/27

Plugin Output

tcp/22/ssh

```
The following client-to-server Cipher Block Chaining (CBC) algorithms
are supported :
 3des-cbc
 aes128-cbc
 aes192-cbc
 aes256-cbc
 blowfish-cbc
 cast128-cbc
rijndael-cbc@lysator.liu.se
The following server-to-client Cipher Block Chaining (CBC) algorithms
are supported :
 3des-cbc
 aes128-cbc
  aes192-cbc
  aes256-cbc
 blowfish-cbc
 cast128-cbc
 rijndael-cbc@lysator.liu.se
```

153953 - SSH Weak Key Exchange Algorithms Enabled

Synopsis The remote SSH server is configured to allow weak key exchange algorithms. Description The remote SSH server is configured to allow key exchange algorithms which are considered weak. This is based on the IETF draft document Key Exchange (KEX) Method Updates and Recommendations for Secure Shell (SSH) RFC9142. Section 4 lists guidance on key exchange algorithms that SHOULD NOT and MUST NOT be enabled. This includes: diffie-hellman-group-exchange-sha1 diffie-hellman-group1-sha1 gss-gex-sha1-* gss-group1-sha1-* gss-group14-sha1-* rsa1024-sha1 Note that this plugin only checks for the options of the SSH server, and it does not check for vulnerable software versions. See Also https://datatracker.ietf.org/doc/html/rfc9142 Solution Contact the vendor or consult product documentation to disable the weak algorithms. Risk Factor Low CVSS v3.0 Base Score 3.7 (CVSS:3.0/AV:N/AC:H/PR:N/UI:N/S:U/C:L/I:N/A:N) CVSS v2.0 Base Score 2.6 (CVSS2#AV:N/AC:H/Au:N/C:P/I:N/A:N) Plugin Information

192.168.86.37

Published: 2021/10/13, Modified: 2024/03/22

Plugin Output

tcp/22/ssh

```
The following weak key exchange algorithms are enabled:

diffie-hellman-group-exchange-sha1
diffie-hellman-group1-sha1
```

71049 - SSH Weak MAC Algorithms Enabled

Synopsis

The remote SSH server is configured to allow MD5 and 96-bit MAC algorithms.

Description

The remote SSH server is configured to allow either MD5 or 96-bit MAC algorithms, both of which are considered weak.

Note that this plugin only checks for the options of the SSH server, and it does not check for vulnerable software versions.

Solution

Contact the vendor or consult product documentation to disable MD5 and 96-bit MAC algorithms.

Risk Factor

Low

CVSS v2.0 Base Score

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

Plugin Information

Published: 2013/11/22, Modified: 2016/12/14

Plugin Output

tcp/22/ssh

```
The following client-to-server Message Authentication Code (MAC) algorithms are supported:

hmac-md5
hmac-md5-96
hmac-sha1-96

The following server-to-client Message Authentication Code (MAC) algorithms are supported:

hmac-md5
hmac-md5
hmac-md5
hmac-md5-96
hmac-sha1-96
```

83875 - SSL/TLS Diffie-Hellman Modulus <= 1024 Bits (Logjam

Synopsis
The remote host allows SSL/TLS connections with one or more Diffie-Hellman moduli less than or equal to 1024 bits.
Description
The remote host allows SSL/TLS connections with one or more Diffie-Hellman moduli less than or equal to 1024 bits. Through cryptanalysis, a third party may be able to find the shared secret in a short amount of time (depending on modulus size and attacker resources). This may allow an attacker to recover the plaintext or potentially violate the integrity of connections.
See Also
https://weakdh.org/
Solution
Reconfigure the service to use a unique Diffie-Hellman moduli of 2048 bits or greater.
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
2.9
EPSS Score
0.974
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
1.9 (CVSS2#E:U/RL:OF/RC:C)

References

BID 74733

CVE CVE-2015-4000

XREF CEA-ID:CEA-2021-0004

Plugin Information

Published: 2015/05/28, Modified: 2022/12/05

Plugin Output

tcp/25/smtp

```
Vulnerable connection combinations:

SSL/TLS version : SSLv3
Cipher suite : TLS1_CK_DHE_RSA_EXPORT_WITH_DES40_CBC_SHA
Diffie-Hellman MODP size (bits) : 512
Logjam attack difficulty : Easy (could be carried out by individuals)

SSL/TLS version : TLSv1.0
Cipher suite : TLS1_CK_DHE_RSA_EXPORT_WITH_DES40_CBC_SHA
Diffie-Hellman MODP size (bits) : 512
Logjam attack difficulty : Easy (could be carried out by individuals)
```

83738 - SSL/TLS EXPORT DHE <= 512-bit Export Cipher Suites Supported (Logjam

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.
See Also
https://weakdh.org/
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
2.9
EPSS Score
0.974
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)

References

BID 74733

CVE CVE-2015-4000

XREF CEA-ID:CEA-2021-0004

Plugin Information

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

Plugin Output

tcp/25/smtp

{export flag}

```
EXPORT_DHE cipher suites supported by the remote server :
 Low Strength Ciphers (<= 64-bit key)
                                                          Auth Encryption
                               Code
                                              KEX
                                                                                        MAC
                              . . . . . . . . . .
                                              - - -
                                                          RSA DES-CBC(40)
                                            DH(512)
  EXP-EDH-RSA-DES-CBC-SHA
                             0x00, 0x14
 SHA1 export
  EXP-ADH-DES-CBC-SHA
                             0x00, 0x19
                                             DH(512)
                                                          None DES-CBC(40)
 SHA1 export
                             0x00, 0x17
                                                           None RC4 (40)
   EXP-ADH-RC4-MD5
                                              DH(512)
                                                                                        MD5
     export
The fields above are :
  {Tenable ciphername}
 {Cipher ID code}
 Kex={key exchange}
 Auth={authentication}
 Encrypt={symmetric encryption method}
 MAC={message authentication code}
```

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.

See Also

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

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

https://tools.ietf.org/html/draft-ietf-tls-downgrade-scsv-00

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

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

CVSS v3.0 Temporal Score

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

VPR Score

5.1

EPSS Score

0.9749

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

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

References

BID 70574

CVE CVE-2014-3566 XREF CERT:577193

Plugin Information

Published: 2014/10/15, Modified: 2023/06/23

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.

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.

See Also

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

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

https://tools.ietf.org/html/draft-ietf-tls-downgrade-scsv-00

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

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

CVSS v3.0 Temporal Score

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

VPR Score

5.1

EPSS Score

0.9749

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

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

References

BID 70574

CVE CVE-2014-3566 XREF CERT:577193

Plugin Information

Published: 2014/10/15, Modified: 2023/06/23

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.

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 Information

Published: 2000/05/12, Modified: 2019/03/05

Plugin Output

tcp/6000/x11

X11 Version : 11.0