Scan Report

May 30, 2023

Summary

This document reports on the results of an automatic security scan. All dates are displayed using the timezone "Coordinated Universal Time", which is abbreviated "UTC". The task was "Immediate scan of IP 172.16.10.0/24". The scan started at Tue May 30 22:15:08 2023 UTC and ended at Tue May 30 22:31:32 2023 UTC. The report first summarises the results found. Then, for each host, the report describes every issue found. Please consider the advice given in each description, in order to rectify the issue.

Contents

1 Result Overview

Host	High	Medium	Low	Log	False Positive
172.16.10.225	1	3	2	0	0
172.16.10.39	1	3	2	0	0
172.16.10.2	0	0	2	0	0
172.16.10.1	0	0	1	0	0
Total: 4	2	6	7	0	0

Vendor security updates are not trusted.
Overrides are off. Even when a result has an override, this report uses the actual threat of the result.
Information on overrides is included in the report.
Notes are included in the report.
This report might not show details of all issues that were found.
Issues with the threat level "Log" are not shown.
Issues with the threat level "Debug" are not shown.
Issues with the threat level "False Positive" are not shown.
Only results with a minimum QoD of 70 are shown.

This report contains all 15 results selected by the filtering described above. Before filtering there were 355 results.

2 Results per Host

2.1 172.16.10.225

Host scan start	Tue May 30 22:15:50 2023 UTC
Host scan end	Tue May 30 22:31:25 2023 UTC

Service (Port)	Threat Level
80/tcp	High
80/tcp	Medium
22/tcp	Medium
general/icmp	Low
general/tcp	Low

2.1.1 High 80/tcp

High (CVSS: 7.5)
NVT: phpinfo() output Reporting

Summary

. . . continues on next page . . .

... continued from previous page ...

Many PHP installation tutorials instruct the user to create a file called phpinfo.php or similar containing the phpinfo() statement. Such a file is often left back in the webserver directory.

Vulnerability Detection Result

```
The following files are calling the function phpinfo() which disclose potentiall
↪y sensitive information:
http://172.16.10.225/info.php
```

Impact

Some of the information that can be gathered from this file includes:
The username of the user running the PHP process, if it is a sudo user, the IP address of the host, the web server version, the system version (Unix, Linux, Windows, ...), and the root directory of the web server.

Solution:

Solution type: Workaround

Delete the listed files or restrict access to them.

Vulnerability Detection Method

Details: `phpinfo() output Reporting`
OID:1.3.6.1.4.1.25623.1.0.11229
Version used: `2020-08-24T15:18:35Z`

[return to 172.16.10.225]

2.1.2 Medium 80/tcp

Medium (CVSS: 5.8)
NVT: HTTP Debugging Methods (TRACE/TRACK) Enabled

Summary

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

Vulnerability Detection Result

```
The web server has the following HTTP methods enabled: TRACE
```

Impact

An attacker may use this flaw to trick your legitimate web users to give him their credentials.

Solution:

Solution type: Mitigation

Disable the TRACE and TRACK methods in your web server configuration.
Please see the manual of your web server or the references for more information.

... continues on next page ...

... continued from previous page ...

Affected Software/OS
Web servers with enabled TRACE and/or TRACK methods.

Vulnerability Insight
It has been shown that web servers supporting this methods are subject to cross-site-scripting attacks, dubbed XST for Cross-Site-Tracing, when used in conjunction with various weaknesses in browsers.

Vulnerability Detection Method
Checks if HTTP methods such as TRACE and TRACK are enabled and can be used.
Details: `HTTP Debugging Methods (TRACE/TRACK) Enabled`
OID:1.3.6.1.4.1.25623.1.0.11213
Version used: `2022-05-12T09:32:01Z`

References
cve: CVE-2003-1567
cve: CVE-2004-2320
cve: CVE-2004-2763
cve: CVE-2005-3398
cve: CVE-2006-4683
cve: CVE-2007-3008
cve: CVE-2008-7253
cve: CVE-2009-2823
cve: CVE-2010-0386
cve: CVE-2012-2223
cve: CVE-2014-7883
url: http://www.kb.cert.org/vuls/id/288308
url: http://www.securityfocus.com/bid/11604
url: http://www.securityfocus.com/bid/15222
url: http://www.securityfocus.com/bid/19915
url: http://www.securityfocus.com/bid/24456
url: http://www.securityfocus.com/bid/33374
url: http://www.securityfocus.com/bid/36956
url: http://www.securityfocus.com/bid/36990
url: http://www.securityfocus.com/bid/37995
url: http://www.securityfocus.com/bid/9506
url: http://www.securityfocus.com/bid/9561
url: http://www.kb.cert.org/vuls/id/867593
url: https://httpd.apache.org/docs/current/en/mod/core.html#traceenable
url: https://techcommunity.microsoft.com/t5/iis-support-blog/http-track-and-trac
↪e-verbs/ba-p/784482
url: https://owasp.org/www-community/attacks/Cross_Site_Tracing
cert-bund: CB-K14/0981
dfn-cert: DFN-CERT-2021-1825
dfn-cert: DFN-CERT-2014-1018

... continues on next page ...

... continued from previous page ...

dfn-cert: DFN-CERT-2010-0020

[return to 172.16.10.225]

2.1.3 Medium 22/tcp

Medium (CVSS: 5.3)
NVT: Weak Key Exchange (KEX) Algorithm(s) Supported (SSH)

Summary
The remote SSH server is configured to allow / support weak key exchange (KEX) algorithm(s).

Vulnerability Detection Result

```
The remote SSH server supports the following weak KEX algorithm(s):
KEX algorithm                      | Reason
-----------------------------------------------------------------------------
↪-----------
diffie-hellman-group-exchange-sha1 | Using SHA-1
diffie-hellman-group1-sha1         | Using Oakley Group 2 (a 1024-bit MODP group
↪) and SHA-1
```

Impact
An attacker can quickly break individual connections.

Solution:
Solution type: Mitigation
Disable the reported weak KEX algorithm(s)
- 1024-bit MODP group / prime KEX algorithms:
Alternatively use elliptic-curve Diffie-Hellmann in general, e.g. Curve 25519.

Vulnerability Insight
- 1024-bit MODP group / prime KEX algorithms:
Millions of HTTPS, SSH, and VPN servers all use the same prime numbers for Diffie-Hellman key exchange. Practitioners believed this was safe as long as new key exchange messages were generated for every connection. However, the first step in the number field sieve-the most efficient algorithm for breaking a Diffie-Hellman connection-is dependent only on this prime.
A nation-state can break a 1024-bit prime.

Vulnerability Detection Method
Checks the supported KEX algorithms of the remote SSH server.
Currently weak KEX algorithms are defined as the following:
- non-elliptic-curve Diffie-Hellmann (DH) KEX algorithms with 1024-bit MODP group / prime
- ephemerally generated key exchange groups uses SHA-1
- using RSA 1024-bit modulus key
Details: `Weak Key Exchange (KEX) Algorithm(s) Supported (SSH)`

... continues on next page ...

... continued from previous page ...

OID:1.3.6.1.4.1.25623.1.0.150713
Version used: 2022-12-08T10:12:32Z

References
url: https://weakdh.org/sysadmin.html
url: https://www.rfc-editor.org/rfc/rfc9142.html
url: https://www.rfc-editor.org/rfc/rfc9142.html#name-summary-guidance-for-imple
↪m
url: https://datatracker.ietf.org/doc/html/rfc6194

Medium (CVSS: 4.3)
NVT: Weak Encryption Algorithm(s) Supported (SSH)

Summary
The remote SSH server is configured to allow / support weak encryption algorithm(s).

Vulnerability Detection Result
The remote SSH server supports the following weak client-to-server encryption al
↪gorithm(s):
3des-cbc
aes128-cbc
aes192-cbc
aes256-cbc
blowfish-cbc
cast128-cbc
The remote SSH server supports the following weak server-to-client encryption al
↪gorithm(s):
3des-cbc
aes128-cbc
aes192-cbc
aes256-cbc
blowfish-cbc
cast128-cbc

Solution:
Solution type: Mitigation
Disable the reported weak encryption algorithm(s).

Vulnerability Insight
- The 'arcfour' cipher is the Arcfour stream cipher with 128-bit keys. The Arcfour cipher is believed to be compatible with the RC4 cipher [SCHNEIER]. Arcfour (and RC4) has problems with weak keys, and should not be used anymore.
- The 'none' algorithm specifies that no encryption is to be done. Note that this method provides no confidentiality protection, and it is NOT RECOMMENDED to use it.

... continues on next page ...

... continued from previous page ...

- A vulnerability exists in SSH messages that employ CBC mode that may allow an attacker to recover plaintext from a block of ciphertext.

Vulnerability Detection Method
Checks the supported encryption algorithms (client-to-server and server-to-client) of the remote SSH server.
Currently weak encryption algorithms are defined as the following:
- Arcfour (RC4) cipher based algorithms
- none algorithm
- CBC mode cipher based algorithms
Details: `Weak Encryption Algorithm(s) Supported (SSH)`
OID:1.3.6.1.4.1.25623.1.0.105611
Version used: `2022-12-09T10:11:04Z`

References
`url: https://www.rfc-editor.org/rfc/rfc4253#section-6.3`
`url: https://www.kb.cert.org/vuls/id/958563`

[return to 172.16.10.225]

2.1.4 Low general/icmp

Low (CVSS: 2.1)
NVT: ICMP Timestamp Reply Information Disclosure

Summary
The remote host responded to an ICMP timestamp request.

Vulnerability Detection Result
`The following response / ICMP packet has been received:`
`- ICMP Type: 14`
`- ICMP Code: 0`

Impact
This information could theoretically be used to exploit weak time-based random number generators in other services.

Solution:
Solution type: Mitigation
Various mitigations are possible:
- Disable the support for ICMP timestamp on the remote host completely
- Protect the remote host by a firewall, and block ICMP packets passing through the firewall in either direction (either completely or only for untrusted networks)

Vulnerability Insight

... continues on next page ...

... continued from previous page ...

The Timestamp Reply is an ICMP message which replies to a Timestamp message. It consists of the originating timestamp sent by the sender of the Timestamp as well as a receive timestamp and a transmit timestamp.

Vulnerability Detection Method
Sends an ICMP Timestamp (Type 13) request and checks if a Timestamp Reply (Type 14) is received.
Details: `ICMP Timestamp Reply Information Disclosure`
OID:1.3.6.1.4.1.25623.1.0.103190
Version used: `2023-05-11T09:09:33Z`

References
`cve: CVE-1999-0524`
`url: https://datatracker.ietf.org/doc/html/rfc792`
`url: https://datatracker.ietf.org/doc/html/rfc2780`
`cert-bund: CB-K15/1514`
`cert-bund: CB-K14/0632`
`dfn-cert: DFN-CERT-2014-0658`

[return to 172.16.10.225]

2.1.5 Low general/tcp

Low (CVSS: 2.6)
NVT: TCP Timestamps Information Disclosure

Summary
The remote host implements TCP timestamps and therefore allows to compute the uptime.

Vulnerability Detection Result
```
It was detected that the host implements RFC1323/RFC7323.
The following timestamps were retrieved with a delay of 1 seconds in-between:
Packet 1: 3722907236
Packet 2: 3722908339
```

Impact
A side effect of this feature is that the uptime of the remote host can sometimes be computed.

Solution:
Solution type: Mitigation
To disable TCP timestamps on linux add the line 'net.ipv4.tcp_timestamps = 0' to /etc/sysctl.conf. Execute 'sysctl -p' to apply the settings at runtime.
To disable TCP timestamps on Windows execute 'netsh int tcp set global timestamps=disabled' Starting with Windows Server 2008 and Vista, the timestamp can not be completely disabled.

... continues on next page ...

... continued from previous page ...

The default behavior of the TCP/IP stack on this Systems is to not use the Timestamp options when initiating TCP connections, but use them if the TCP peer that is initiating communication includes them in their synchronize (SYN) segment.
See the references for more information.

Affected Software/OS
TCP implementations that implement RFC1323/RFC7323.

Vulnerability Insight
The remote host implements TCP timestamps, as defined by RFC1323/RFC7323.

Vulnerability Detection Method
Special IP packets are forged and sent with a little delay in between to the target IP. The responses are searched for a timestamps. If found, the timestamps are reported.
Details: `TCP Timestamps Information Disclosure`
OID:1.3.6.1.4.1.25623.1.0.80091
Version used: `2023-05-11T09:09:33Z`

References
`url: https://datatracker.ietf.org/doc/html/rfc1323`
`url: https://datatracker.ietf.org/doc/html/rfc7323`
`url: https://web.archive.org/web/20151213072445/http://www.microsoft.com/en-us/d`
`↪ownload/details.aspx?id=9152`

[return to 172.16.10.225]

2.2 172.16.10.39

Host scan start	Tue May 30 22:15:50 2023 UTC
Host scan end	Tue May 30 22:31:24 2023 UTC

Service (Port)	Threat Level
80/tcp	High
22/tcp	Medium
80/tcp	Medium
general/tcp	Low
general/icmp	Low

2.2.1 High 80/tcp

High (CVSS: 7.5)
NVT: phpinfo() output Reporting

... continues on next page ...

... continued from previous page ...

Summary
Many PHP installation tutorials instruct the user to create a file called phpinfo.php or similar containing the phpinfo() statement. Such a file is often left back in the webserver directory.

Vulnerability Detection Result
```
The following files are calling the function phpinfo() which disclose potentiall
↪y sensitive information:
http://172.16.10.39/info.php
```

Impact
Some of the information that can be gathered from this file includes:
The username of the user running the PHP process, if it is a sudo user, the IP address of the host, the web server version, the system version (Unix, Linux, Windows, ...), and the root directory of the web server.

Solution:
Solution type: Workaround
Delete the listed files or restrict access to them.

Vulnerability Detection Method
Details: `phpinfo() output Reporting`
OID:1.3.6.1.4.1.25623.1.0.11229
Version used: `2020-08-24T15:18:35Z`

[return to 172.16.10.39]

2.2.2 Medium 22/tcp

Medium (CVSS: 5.3)
NVT: Weak Key Exchange (KEX) Algorithm(s) Supported (SSH)

Summary
The remote SSH server is configured to allow / support weak key exchange (KEX) algorithm(s).

Vulnerability Detection Result
```
The remote SSH server supports the following weak KEX algorithm(s):
KEX algorithm                      | Reason
-----------------------------------------------------------------------------
↪-----------
diffie-hellman-group-exchange-sha1 | Using SHA-1
diffie-hellman-group1-sha1         | Using Oakley Group 2 (a 1024-bit MODP group
↪) and SHA-1
```

Impact

... continues on next page ...

... continued from previous page ...

An attacker can quickly break individual connections.

Solution:
Solution type: Mitigation
Disable the reported weak KEX algorithm(s)
- 1024-bit MODP group / prime KEX algorithms:
Alternatively use elliptic-curve Diffie-Hellmann in general, e.g. Curve 25519.

Vulnerability Insight
- 1024-bit MODP group / prime KEX algorithms:
Millions of HTTPS, SSH, and VPN servers all use the same prime numbers for Diffie-Hellman key exchange. Practitioners believed this was safe as long as new key exchange messages were generated for every connection. However, the first step in the number field sieve-the most efficient algorithm for breaking a Diffie-Hellman connection-is dependent only on this prime.
A nation-state can break a 1024-bit prime.

Vulnerability Detection Method
Checks the supported KEX algorithms of the remote SSH server.
Currently weak KEX algorithms are defined as the following:
- non-elliptic-curve Diffie-Hellmann (DH) KEX algorithms with 1024-bit MODP group / prime
- ephemerally generated key exchange groups uses SHA-1
- using RSA 1024-bit modulus key
Details: `Weak Key Exchange (KEX) Algorithm(s) Supported (SSH)`
OID:1.3.6.1.4.1.25623.1.0.150713
Version used: `2022-12-08T10:12:32Z`

References
`url: https://weakdh.org/sysadmin.html`
`url: https://www.rfc-editor.org/rfc/rfc9142.html`
`url: https://www.rfc-editor.org/rfc/rfc9142.html#name-summary-guidance-for-imple`
`↪m`
`url: https://datatracker.ietf.org/doc/html/rfc6194`

Medium (CVSS: 4.3)
NVT: Weak Encryption Algorithm(s) Supported (SSH)

Summary
The remote SSH server is configured to allow / support weak encryption algorithm(s).

Vulnerability Detection Result
`The remote SSH server supports the following weak client-to-server encryption al`
`↪gorithm(s):`
`3des-cbc`
`aes128-cbc`
`aes192-cbc`

... continues on next page ...

... continued from previous page ...

```
aes256-cbc
blowfish-cbc
cast128-cbc
The remote SSH server supports the following weak server-to-client encryption al
↪gorithm(s):
3des-cbc
aes128-cbc
aes192-cbc
aes256-cbc
blowfish-cbc
cast128-cbc
```

Solution:
Solution type: Mitigation
Disable the reported weak encryption algorithm(s).

Vulnerability Insight
- The 'arcfour' cipher is the Arcfour stream cipher with 128-bit keys. The Arcfour cipher is believed to be compatible with the RC4 cipher [SCHNEIER]. Arcfour (and RC4) has problems with weak keys, and should not be used anymore.
- The 'none' algorithm specifies that no encryption is to be done. Note that this method provides no confidentiality protection, and it is NOT RECOMMENDED to use it.
- A vulnerability exists in SSH messages that employ CBC mode that may allow an attacker to recover plaintext from a block of ciphertext.

Vulnerability Detection Method
Checks the supported encryption algorithms (client-to-server and server-to-client) of the remote SSH server.
Currently weak encryption algorithms are defined as the following:
- Arcfour (RC4) cipher based algorithms
- none algorithm
- CBC mode cipher based algorithms
Details: `Weak Encryption Algorithm(s) Supported (SSH)`
OID:1.3.6.1.4.1.25623.1.0.105611
Version used: `2022-12-09T10:11:04Z`

References
`url: https://www.rfc-editor.org/rfc/rfc4253#section-6.3`
`url: https://www.kb.cert.org/vuls/id/958563`

[return to 172.16.10.39]

2.2.3 Medium 80/tcp

Medium (CVSS: 5.8)
NVT: HTTP Debugging Methods (TRACE/TRACK) Enabled

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

Vulnerability Detection Result
`The web server has the following HTTP methods enabled: TRACE`

Impact
An attacker may use this flaw to trick your legitimate web users to give him their credentials.

Solution:
Solution type: Mitigation
Disable the TRACE and TRACK methods in your web server configuration.
Please see the manual of your web server or the references for more information.

Affected Software/OS
Web servers with enabled TRACE and/or TRACK methods.

Vulnerability Insight
It has been shown that web servers supporting this methods are subject to cross-site-scripting attacks, dubbed XST for Cross-Site-Tracing, when used in conjunction with various weaknesses in browsers.

Vulnerability Detection Method
Checks if HTTP methods such as TRACE and TRACK are enabled and can be used.
Details: `HTTP Debugging Methods (TRACE/TRACK) Enabled`
OID:1.3.6.1.4.1.25623.1.0.11213
Version used: `2022-05-12T09:32:01Z`

References
`cve: CVE-2003-1567`
`cve: CVE-2004-2320`
`cve: CVE-2004-2763`
`cve: CVE-2005-3398`
`cve: CVE-2006-4683`
`cve: CVE-2007-3008`
`cve: CVE-2008-7253`
`cve: CVE-2009-2823`
`cve: CVE-2010-0386`
`cve: CVE-2012-2223`
`cve: CVE-2014-7883`
`url: http://www.kb.cert.org/vuls/id/288308`
`url: http://www.securityfocus.com/bid/11604`
`url: http://www.securityfocus.com/bid/15222`

. . . continues on next page . . .

... continued from previous page ...

```
url: http://www.securityfocus.com/bid/19915
url: http://www.securityfocus.com/bid/24456
url: http://www.securityfocus.com/bid/33374
url: http://www.securityfocus.com/bid/36956
url: http://www.securityfocus.com/bid/36990
url: http://www.securityfocus.com/bid/37995
url: http://www.securityfocus.com/bid/9506
url: http://www.securityfocus.com/bid/9561
url: http://www.kb.cert.org/vuls/id/867593
url: https://httpd.apache.org/docs/current/en/mod/core.html#traceenable
url: https://techcommunity.microsoft.com/t5/iis-support-blog/http-track-and-trac
↪e-verbs/ba-p/784482
url: https://owasp.org/www-community/attacks/Cross_Site_Tracing
cert-bund: CB-K14/0981
dfn-cert: DFN-CERT-2021-1825
dfn-cert: DFN-CERT-2014-1018
dfn-cert: DFN-CERT-2010-0020
```

[return to 172.16.10.39]

2.2.4 Low general/tcp

Low (CVSS: 2.6)
NVT: TCP Timestamps Information Disclosure

Summary
The remote host implements TCP timestamps and therefore allows to compute the uptime.

Vulnerability Detection Result
```
It was detected that the host implements RFC1323/RFC7323.
The following timestamps were retrieved with a delay of 1 seconds in-between:
Packet 1: 3381995275
Packet 2: 3381996345
```

Impact
A side effect of this feature is that the uptime of the remote host can sometimes be computed.

Solution:
Solution type: Mitigation
To disable TCP timestamps on linux add the line 'net.ipv4.tcp_timestamps = 0' to /etc/sysctl.conf. Execute 'sysctl -p' to apply the settings at runtime.
To disable TCP timestamps on Windows execute 'netsh int tcp set global timestamps=disabled' Starting with Windows Server 2008 and Vista, the timestamp can not be completely disabled.
The default behavior of the TCP/IP stack on this Systems is to not use the Timestamp options when initiating TCP connections, but use them if the TCP peer that is initiating communication includes them in their synchronize (SYN) segment.

... continues on next page ...

... continued from previous page ...

See the references for more information.

Affected Software/OS
TCP implementations that implement RFC1323/RFC7323.

Vulnerability Insight
The remote host implements TCP timestamps, as defined by RFC1323/RFC7323.

Vulnerability Detection Method
Special IP packets are forged and sent with a little delay in between to the target IP. The responses are searched for a timestamps. If found, the timestamps are reported.
Details: `TCP Timestamps Information Disclosure`
OID:1.3.6.1.4.1.25623.1.0.80091
Version used: `2023-05-11T09:09:33Z`

References
`url: https://datatracker.ietf.org/doc/html/rfc1323`
`url: https://datatracker.ietf.org/doc/html/rfc7323`
`url: https://web.archive.org/web/20151213072445/http://www.microsoft.com/en-us/d`
`↪ownload/details.aspx?id=9152`

[return to 172.16.10.39]

2.2.5 Low general/icmp

Low (CVSS: 2.1)
NVT: ICMP Timestamp Reply Information Disclosure

Summary
The remote host responded to an ICMP timestamp request.

Vulnerability Detection Result
`The following response / ICMP packet has been received:`
`- ICMP Type: 14`
`- ICMP Code: 0`

Impact
This information could theoretically be used to exploit weak time-based random number generators in other services.

Solution:
Solution type: Mitigation
Various mitigations are possible:
- Disable the support for ICMP timestamp on the remote host completely

... continues on next page ...

... continued from previous page ...

- Protect the remote host by a firewall, and block ICMP packets passing through the firewall in either direction (either completely or only for untrusted networks)

Vulnerability Insight
The Timestamp Reply is an ICMP message which replies to a Timestamp message. It consists of the originating timestamp sent by the sender of the Timestamp as well as a receive timestamp and a transmit timestamp.

Vulnerability Detection Method
Sends an ICMP Timestamp (Type 13) request and checks if a Timestamp Reply (Type 14) is received.
Details: `ICMP Timestamp Reply Information Disclosure`
OID:1.3.6.1.4.1.25623.1.0.103190
Version used: `2023-05-11T09:09:33Z`

References
`cve: CVE-1999-0524`
`url: https://datatracker.ietf.org/doc/html/rfc792`
`url: https://datatracker.ietf.org/doc/html/rfc2780`
`cert-bund: CB-K15/1514`
`cert-bund: CB-K14/0632`
`dfn-cert: DFN-CERT-2014-0658`

[return to 172.16.10.39]

2.3 172.16.10.2

Host scan start	Tue May 30 22:15:50 2023 UTC
Host scan end	Tue May 30 22:26:43 2023 UTC

Service (Port)	Threat Level
general/icmp	Low
general/tcp	Low

2.3.1 Low general/icmp

Low (CVSS: 2.1)
NVT: ICMP Timestamp Reply Information Disclosure

Summary
The remote host responded to an ICMP timestamp request.

Vulnerability Detection Result

... continues on next page ...

... continued from previous page ...

```
The following response / ICMP packet has been received:
- ICMP Type: 14
- ICMP Code: 0
```

Impact
This information could theoretically be used to exploit weak time-based random number generators in other services.

Solution:
Solution type: Mitigation
Various mitigations are possible:
- Disable the support for ICMP timestamp on the remote host completely
- Protect the remote host by a firewall, and block ICMP packets passing through the firewall in either direction (either completely or only for untrusted networks)

Vulnerability Insight
The Timestamp Reply is an ICMP message which replies to a Timestamp message. It consists of the originating timestamp sent by the sender of the Timestamp as well as a receive timestamp and a transmit timestamp.

Vulnerability Detection Method
Sends an ICMP Timestamp (Type 13) request and checks if a Timestamp Reply (Type 14) is received.
Details: `ICMP Timestamp Reply Information Disclosure`
OID:1.3.6.1.4.1.25623.1.0.103190
Version used: `2023-05-11T09:09:33Z`

References
`cve: CVE-1999-0524`
`url: https://datatracker.ietf.org/doc/html/rfc792`
`url: https://datatracker.ietf.org/doc/html/rfc2780`
`cert-bund: CB-K15/1514`
`cert-bund: CB-K14/0632`
`dfn-cert: DFN-CERT-2014-0658`

[return to 172.16.10.2]

2.3.2 Low general/tcp

Low (CVSS: 2.6)
NVT: TCP Timestamps Information Disclosure

Summary
The remote host implements TCP timestamps and therefore allows to compute the uptime.

... continues on next page ...

... continued from previous page ...

Vulnerability Detection Result
It was detected that the host implements RFC1323/RFC7323.
The following timestamps were retrieved with a delay of 1 seconds in-between:
Packet 1: 4244725919
Packet 2: 4244727003

Impact
A side effect of this feature is that the uptime of the remote host can sometimes be computed.

Solution:
Solution type: Mitigation
To disable TCP timestamps on linux add the line 'net.ipv4.tcp_timestamps = 0' to /etc/sysctl.conf. Execute 'sysctl -p' to apply the settings at runtime.
To disable TCP timestamps on Windows execute 'netsh int tcp set global timestamps=disabled' Starting with Windows Server 2008 and Vista, the timestamp can not be completely disabled.
The default behavior of the TCP/IP stack on this Systems is to not use the Timestamp options when initiating TCP connections, but use them if the TCP peer that is initiating communication includes them in their synchronize (SYN) segment.
See the references for more information.

Affected Software/OS
TCP implementations that implement RFC1323/RFC7323.

Vulnerability Insight
The remote host implements TCP timestamps, as defined by RFC1323/RFC7323.

Vulnerability Detection Method
Special IP packets are forged and sent with a little delay in between to the target IP. The responses are searched for a timestamps. If found, the timestamps are reported.
Details: TCP Timestamps Information Disclosure
OID:1.3.6.1.4.1.25623.1.0.80091
Version used: 2023-05-11T09:09:33Z

References
url: https://datatracker.ietf.org/doc/html/rfc1323
url: https://datatracker.ietf.org/doc/html/rfc7323
url: https://web.archive.org/web/20151213072445/http://www.microsoft.com/en-us/d
↪ownload/details.aspx?id=9152

[return to 172.16.10.2]

2.4 172.16.10.1

Host scan start	Tue May 30 22:15:50 2023 UTC
Host scan end	Tue May 30 22:26:37 2023 UTC

Service (Port)	Threat Level
general/icmp	Low

2.4.1 Low general/icmp

Low (CVSS: 2.1)
NVT: ICMP Timestamp Reply Information Disclosure

Summary
The remote host responded to an ICMP timestamp request.

Vulnerability Detection Result
```
The following response / ICMP packet has been received:
- ICMP Type: 14
- ICMP Code: 0
```

Impact
This information could theoretically be used to exploit weak time-based random number generators in other services.

Solution:
Solution type: Mitigation
Various mitigations are possible:
- Disable the support for ICMP timestamp on the remote host completely
- Protect the remote host by a firewall, and block ICMP packets passing through the firewall in either direction (either completely or only for untrusted networks)

Vulnerability Insight
The Timestamp Reply is an ICMP message which replies to a Timestamp message. It consists of the originating timestamp sent by the sender of the Timestamp as well as a receive timestamp and a transmit timestamp.

Vulnerability Detection Method
Sends an ICMP Timestamp (Type 13) request and checks if a Timestamp Reply (Type 14) is received.
Details: `ICMP Timestamp Reply Information Disclosure`
OID:1.3.6.1.4.1.25623.1.0.103190
Version used: `2023-05-11T09:09:33Z`

References
```
cve: CVE-1999-0524
url: https://datatracker.ietf.org/doc/html/rfc792
url: https://datatracker.ietf.org/doc/html/rfc2780
cert-bund: CB-K15/1514
cert-bund: CB-K14/0632
```

... continues on next page ...

... continued from previous page ...

dfn-cert: DFN-CERT-2014-0658

[return to 172.16.10.1]
