# Scan Report

# July 21, 2022

# Summary

This document reports on the results of an automatic security scan. All dates are displayed using the timezone "America/Sao\_Paulo", which is abbreviated "-03". The task was "Immediates can of IP 10.0.0.27". The scan started at Thu 51:482022-03 and ended at Thu Jul 2117:20:442022-03. The report first summarises the results found. Then, for each host, the

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1 RESULT OVERVIEW

# 1 Result Overview

Host	High	Medium	Low	Log	False Positive
10.0.0.27	1	4	2	0	0
Total: 1	1	4	2	0	0

2

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 7 results selected by the filtering described above. Before filtering there were 67 results.

# 2 Results per Host

# $2.1 \quad 10.0.0.27$

Host scan start Thu Jul 21 16:52:17 2022 -03 Host scan end Thu Jul 21 17:20:39 2022 -03

Service (Port)	Threat Level
m general/tcp	High
$22/\mathrm{tcp}$	Medium
$80/\mathrm{tcp}$	Medium
$22/\mathrm{tcp}$	Low
general/tcp	Low

# 2.1.1 High general/tcp

High (CVSS: 10.0)

NVT: Operating System (OS) End of Life (EOL) Detection

# Product detection result

cpe:/o:canonical:ubuntu\_linux:12.04

Detected by OS Detection Consolidation and Reporting (OID: 1.3.6.1.4.1.25623.1.0  $\hookrightarrow$  .105937)

#### Summary

The Operating System (OS) on the remote host has reached the End of Life (EOL) and should not be used anymore.

# Vulnerability Detection Result

The "Ubuntu" Operating System on the remote host has reached the end of life.

CPE: cpe:/o:canonical:ubuntu\_linux:12.04

Installed version,

build or SP: 12.04 EOL date: 2017-04-28

EOL info: https://wiki.ubuntu.com/Releases

### Impact

An EOL version of an OS is not receiving any security updates from the vendor. Unfixed security vulnerabilities might be leveraged by an attacker to compromise the security of this host.

#### Solution:

Solution type: Mitigation

Upgrade the OS on the remote host to a version which is still supported and receiving security updates by the vendor.

# Vulnerability Detection Method

Checks if an EOL version of an OS is present on the target host.

Details: Operating System (OS) End of Life (EOL) Detection

 $\begin{aligned} & \text{OID:} 1.3.6.1.4.1.25623.1.0.103674 \\ & \text{Version used: } \textbf{2022-04-05T13:00:52Z} \end{aligned}$ 

### **Product Detection Result**

Product: cpe:/o:canonical:ubuntu\_linux:12.04 Method: OS Detection Consolidation and Reporting

 $OID\colon 1.3.6.1.4.1.25623.1.0.105937)$ 

[ return to 10.0.0.27 ]

# 2.1.2 Medium 22/tcp

Medium (CVSS: 5<u>.3</u>)

NVT: Weak Host Key Algorithm(s) (SSH)

#### Summary

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

2 RESULTS PER HOST

... continued from previous page ... Vulnerability Detection Result The remote SSH server supports the following weak host key algorithm(s): host key algorithm | Description | Digital Signature Algorithm (DSA) / Digital Signature Stand ssh-dss  $\hookrightarrow$ ard (DSS) Solution: Solution type: Mitigation Disable the reported weak host key algorithm(s). Vulnerability Detection Method Checks the supported host key algorithms of the remote SSH server.

Currently weak host key algorithms are defined as the following:

- ssh-dss: Digital Signature Algorithm (DSA) / Digital Signature Standard (DSS)

Details: Weak Host Key Algorithm(s) (SSH)

OID:1.3.6.1.4.1.25623.1.0.117687 Version used: 2021-11-24T06:31:19Z

# 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): Reason diffie-hellman-group-exchange-sha1 | Using SHA-1 diffie-hellman-group1-sha1 | Using Oakley Group 2 (a 1024-bit MODP group  $\hookrightarrow$ ) and SHA-1

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: 2021-11-24T06:31:19Z

#### References

url: https://weakdh.org/sysadmin.html

url: https://tools.ietf.org/id/draft-ietf-curdle-ssh-kex-sha2-09.html

url: https://tools.ietf.org/id/draft-ietf-curdle-ssh-kex-sha2-09.html#rfc.sectio

 $\hookrightarrow$ n.5

url: https://datatracker.ietf.org/doc/html/rfc6194

#### Medium (CVSS: 4.3)

 $\operatorname{NVT}$ : 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  $\hookrightarrow$ gorithm(s):

3des-cbc

aes128-cbc

aes192-cbc

aes256-cbc

arcfour

arcfour128

arcfour256

blowfish-cbc

cast128-cbc

rijndael-cbc@lysator.liu.se

The remote SSH server supports the following weak server-to-client encryption al  $\hookrightarrow$ gorithm(s):

3des-cbc
aes128-cbc
aes192-cbc
aes256-cbc
arcfour
arcfour128
arcfour256
blowfish-cbc
cast128-cbc
rijndael-cbc@lysator.liu.se

#### 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: 2021-09-20T08:25:27Z

#### References

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

url: https://www.kb.cert.org/vuls/id/958563

[ return to 10.0.0.27 ]

## 2.1.3 Medium 80/tcp

#### Medium (CVSS: 4.3)

NVT: Apache HTTP Server ETag Header Information Disclosure Weakness

#### Product detection result

cpe:/a:apache:http\_server:2.2.22

Detected by Apache HTTP Server Detection Consolidation (OID: 1.3.6.1.4.1.25623.1  $\hookrightarrow$  .0.117232)

### Summary

A weakness has been discovered in the Apache HTTP Server if configured to use the FileETag directive

#### Vulnerability Detection Result

Information that was gathered:

Inode: 153327 Size: 836

#### Impact

Exploitation of this issue may provide an attacker with information that may be used to launch further attacks against a target network.

#### Solution:

Solution type: VendorFix

OpenBSD has released a patch that addresses this issue. Inode numbers returned from the server are now encoded using a private hash to avoid the release of sensitive information.

Novell has released TID10090670 to advise users to apply the available workaround of disabling the directive in the configuration file for Apache releases on NetWare. Please see the attached Technical Information Document for further details.

### Vulnerability Detection Method

Due to the way in which Apache HTTP Server generates ETag response headers, it may be possible for an attacker to obtain sensitive information regarding server files. Specifically, ETag header fields returned to a client contain the file's inode number.

Details: Apache HTTP Server ETag Header Information Disclosure Weakness

OID:1.3.6.1.4.1.25623.1.0.103122 Version used: 2022-04-28T13:38:57Z

# **Product Detection Result**

Product: cpe:/a:apache:http\_server:2.2.22

 $\operatorname{Method}$ : Apache HTTP Server Detection Consolidation

OID: 1.3.6.1.4.1.25623.1.0.117232)

#### References

cve: CVE-2003-1418

url: http://www.securityfocus.com/bid/6939

2 RESULTS PER HOST

url: http://httpd.apache.org/docs/mod/core.html#fileetag
url: http://www.openbsd.org/errata32.html
url: http://support.novell.com/docs/Tids/Solutions/10090670.html
cert-bund: CB-K17/1750
cert-bund: CB-K17/0896
cert-bund: CB-K15/0469
dfn-cert: DFN-CERT-2017-1821
dfn-cert: DFN-CERT-2017-0925
dfn-cert: DFN-CERT-2015-0495

[ return to 10.0.0.27 ]

# 2.1.4 Low 22/tcp

```
Low (CVSS: 2.6)

NVT: Weak MAC Algorithm(s) Supported (SSH)
```

#### Summary

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

# Vulnerability Detection Result

The remote SSH server supports the following weak client-to-server MAC algorithm  $\hookrightarrow$  (s):

hmac-md5

hmac-md5-96

hmac-sha1-96

hmac-sha2-256-96

hmac-sha2-512-96

The remote SSH server supports the following weak server-to-client MAC algorithm  $\hookrightarrow$  (s):

hmac-md5

hmac-md5-96

hmac-sha1-96

hmac-sha2-256-96

hmac-sha2-512-96

#### Solution:

Solution type: Mitigation

Disable the reported weak MAC algorithm(s).

#### Vulnerability Detection Method

Checks the supported MAC algorithms (client-to-server and server-to-client) of the remote SSH server.

Currently weak MAC algorithms are defined as the following:

-  $\mathrm{MD}5$  based algorithms

- 96-bit based algorithms

- none algorithm

Details: Weak MAC Algorithm(s) Supported (SSH)

OID:1.3.6.1.4.1.25623.1.0.105610 Version used: 2021-09-20T11:05:40Z

[ return to 10.0.0.27 ]

#### 2.1.5 Low general/tcp

# Low (CVSS: 2.6)

NVT: TCP timestamps

## 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: 96901858 Packet 2: 96902134

#### 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 OID:1.3.6.1.4.1.25623.1.0.80091

Version used: 2020-08-24T08:40:10Z

# References

url: http://www.ietf.org/rfc/rfc1323.txt url: http://www.ietf.org/rfc/rfc7323.txt

url: https://web.archive.org/web/20151213072445/http://www.microsoft.com/en-us/d

→ownload/details.aspx?id=9152

[ return to 10.0.0.27 ]

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