Nessus Testing

The instance of Nessus Pro local to Pomona ITS:

https://nessus.campus.pomona.edu:8834

Relevant Docs:

http://info.tenable.com/rs/934-XQB-568/images/NessusPro DS EN v8.pdf

https://docs.tenable.com/nessus/Content/Workflow.htm

https://docs.tenable.com/nessus/Content/CreateAScan.htm

https://docs.tenable.com/nessus/Content/InstallNessusAgentLinux.htm

https://www.tenable.com/downloads/nessus-agents

https://docs.tenable.com/nessus/Content/Resources/PDF/Nessus 7 1.pdf

https://www.tenable.com/blog/linuxunix-patch-auditing-using-nessus

Reached out to Nessus to test Nessus Manager:

Thank you for your interest in Nessus® Manager from Tenable Network Security. A Tenable representative will contact you shortly about your evaluation request. In the meantime, you can learn more about Nessus Manager through these materials:

- Video: Nessus Manager Deployment Strategies
- Article: Introducing Nessus Manager and Nessus Cloud
- Video: Introduction to Nessus Agents
- White Paper: <u>Understanding Nessus Agents</u>

Sincerely,

The Nessus Manager Team

Register for tenable.io:

Hello Asya,

We are pleased to offer you an evaluation of the following Tenable.io application(s):

- Container Security
- Vulnerability Management
- Web Application Scanning

Your evaluation is licensed for **60 days** from the date of activation. Once the evaluation period expires, you will need to purchase a subscription to continue your use the Tenable.io application(s) listed above.

Set your password

Eval Resources:

To get the most from your evaluation, please make use of the following resources:

- Product Documentation for more detailed information about features and functionality
- Get access to free <u>Product Training</u> videos
- The Tenable Community where you can participate in discussions with peers

For technical issues, please email eval@tenable.com to create a case.

If you have any questions during your trial, or believe you do not have an evaluation underway, please <u>contact us</u> or your Tenable partner at any time.

https://cloud.tenable.com/app.html#/dashboards/workbench/vulnerabilities/plugin

Install Agents:

AsyaShklyer-mac68:~ asaj2017\$ sudo /Library/NessusAgent/run/sbin/nessuscli agent link --host=cloud.tenable.com --port=443

--key=11932b06b801fad4bb291b57dc4e47ef550b72507450655e3ec2cb729555e66a [info] [agent] HostTag::getUnix: setting TAG value to '9d576462ffeb4a378fdfa4d66aba7c49' [info] [agent] Successfully linked to cloud.tenable.com:443

[root@rstudio2 ~]# rpm -ivh /tmp/NessusAgent-7.1.0-es7.x86_64.rpm warning: /tmp/NessusAgent-7.1.0-es7.x86_64.rpm: Header V4 RSA/SHA1 Signature, key ID 1c0c4a5d: NOKEY

Preparing... ################ [100%]

Updating / installing...

- First, link this agent to the Nessus Manager with the '/opt/nessus_agent/sbin/nessuscli agent' command.

Type '/opt/nessus_agent/sbin/nessuscli agent help' for more info.

- You can start Nessus Agent by typing /bin/systemctl start nessusagent.service

Start Nessus Agent on Linux: /bin/systemctl start nessusagent.service

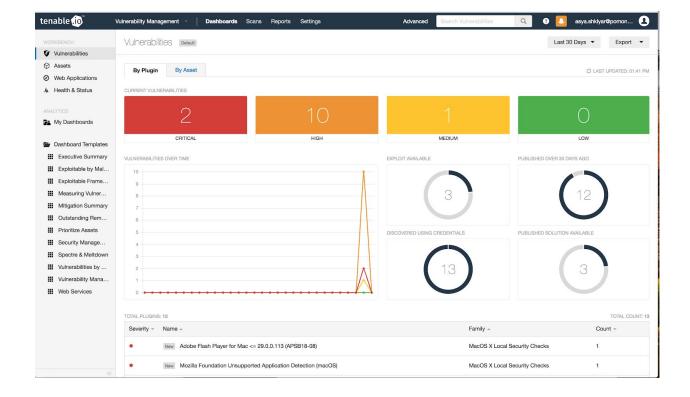
Link agents to tenable.io:

[root@rstudio2 ~]# /opt/nessus_agent/sbin/nessuscli agent link --host=cloud.tenable.com --port=443

--key=11932b06b801fad4bb291b57dc4e47ef550b72507450655e3ec2cb729555e66a [Thu Jun 28 17:31:02 2018][2774.1] _qdb_open:/opt/nessus_agent/var/nessus/plugins-desc.db: Invalid table of contents

[info] [agent] HostTag::getUnix: setting TAG value to '283a5067d8944918a7523a6e2c9cb682' [info] [agent] Successfully linked to cloud.tenable.com:443

Cole is working with William to get tenable.io (\$8K a year instead of \$2K).



Vulnerabilities / Plugin #108959

◆ Back to Workbench

CRITICAL

Adobe Flash Player for Mac <= 29.0.0.113 (APSB18-08)

Description

The version of Adobe Flash Player installed on the remote macOS or Mac OS X host is equal or prior to version 29.0.0.113. It is therefore affected by multiple vulnerabilities.

Solution

Upgrade to Adobe Flash Player version 29.0.0.140 or later.

See Also

https://helpx.adobe.com/security/products/flash-player/apsb18-08.html http://www.nessus.org/u?0cb17c10

Output

Path : /Library/Internet Plug-Ins/Flash Player.plugin
Installed version : 27.0.0.187
Fixed version : 29.0.0.140

Severity State Port Assets

New N/A asyashklyer-mac68

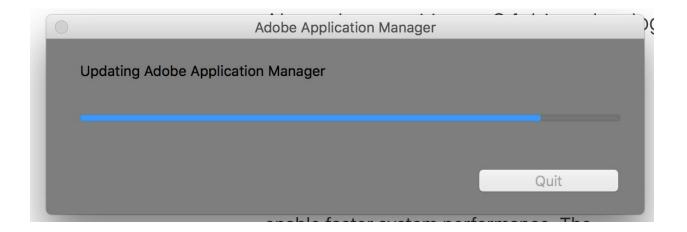


"AdobeApplicationManager" is not optimized for your Mac.

This app needs to be updated by its developer to improve compatibility.

Learn More...

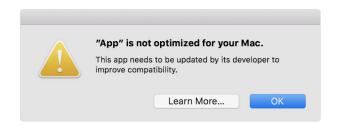
OK



32-bit app compatibility with macOS High Sierra 10.13.4

About the transition to 64-bit technology and how it affects 32-bit apps.

State-of-the-art technology is what makes a Mac a Mac. All modern Macs include powerful 64-bit processors, and macOS runs advanced 64-bit apps, which can access dramatically more memory and enable faster system performance. The technologies that define today's Mac experience—such as Metal graphics



acceleration—work only with 64-bit apps. To ensure that the apps you purchase are as advanced as the Mac you run them on, all future Mac software will eventually be required to be 64-bit.

Apple began the transition to 64-bit hardware and software technology for Mac over a decade ago, and is working with developers to transition their apps to 64-bit. At our Worldwide Developers Conference in 2017, Apple informed developers that macOS High Sierra would be the last version of macOS to run 32-bit apps without compromise.

While developers optimize their apps for 64-bit compatibility, Apple is notifying customers when they are using an app based on 32-bit technology. This is done via a one-time alert that appears when you launch a 32-bit app.

Below you will find more information about the alert and what the 64-bit transition means for you.

Security updates available for Flash Player | APSB18-08

Bulletin ID	Date Published	Priority
APSB18-08	April 10, 2018	2

Version Information

You have version 30,0,0,113 installed

CRITICAL

Mozilla Foundation Unsupported Application Detection (macOS)

Description

According to its version, there is at least one unsupported Mozilla application (Firefox and/or Thunderbird) installed on the remote host. This version of the software is no longer actively maintained.

Lack of support implies that no new security patches for the product will be released by the vendor. As a result, it is likely to contain security vulnerabilities.

Solution

Upgrade to a version that is currently supported.

See Also

https://www.mozilla.org/en-US/firefox/organizations/faq/https://www.mozilla.org/en-US/security/known-vulnerabilities/https://www.mozilla.org/en-US/firefox/new/https://www.mozilla.org/en-US/thunderbird/

Output

•	New	N/A	asyashklyer-mac68		
Severity -	State	Port	Assets		
Product Path Installed version Latest version EOL URL		: /Applicati n : 52.5.2 : 52.8.0			

Firefox⁻ESR

52.5.2 (64-bit) What's new

Restart Firefox to Update

You are currently on the esr update channel.

Firefox is designed by Mozilla, a global community working together to keep the Web open, public and accessible to all.

Want to help? Make a donation or get involved!





Scan Details

Name: Linux Scan

Status: Completed

Policy: Advanced Agent Scan

Start: June 28 at 5:33 PM

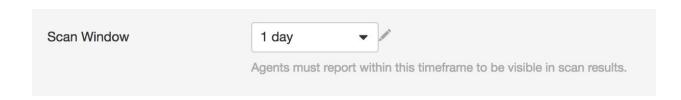
End: June 28 at 8:33 PM

Elapsed: 3 hours

Agent Details

Groups: Linux Servers

Reported: 0 of 1



Scanned a Mac (my own) and a Linux (RStudio2)

Mac found 2 criticals.

Adobe version seems to be a bug because it says install above version 29 but I have v30 installed. Will need to submit a ticket with support.

Firefox was updated. Re-running the scan.

Linux scan returned zero information, possibly because of a 3 hours scanning window? Increased to 1 day. Re-running.

These are the details of trying to start the Linux Agent:

[asaj2017@rstudio2 ~]\$ /bin/systemctl start nessusagent.service ==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ===

Authentication is required to manage system services or units.

Multiple identities can be used for authentication:

- 1. Patrick Flannery (pat)
- 2. Linux Admin, 18506, Pomona ITB (jbsadmin)

Choose identity to authenticate as (1-2):

[root@rstudio2 ~]# /bin/systemctl start nessusagent.service

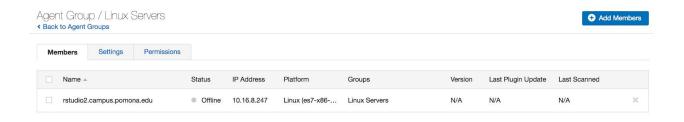
Added asaj2017 to visudo

disk:x:6:

[root@rstudio2 rules.d]# cat /etc/group root:x:0:
bin:x:1:
daemon:x:2:
sys:x:3:
adm:x:4:
tty:x:5:

```
lp:x:7:
mem:x:8:
kmem:x:9:
wheel:x:10:pat,jbsadmin
[root@rstudio2 ~]# cd /etc/polkit-1/
[root@rstudio2 polkit-1]# ls
localauthority localauthority.conf.d rules.d
[root@rstudio2 polkit-1]# cd rules.d/
[root@rstudio2 rules.d]# cat 50-default.rules
/* -*- mode: js; js-indent-level: 4; indent-tabs-mode: nil -*- */
// DO NOT EDIT THIS FILE, it will be overwritten on update
//
// Default rules for polkit
// See the polkit(8) man page for more information
// about configuring polkit.
polkit.addAdminRule(function(action, subject) {
  return ["unix-group:wheel"];
});
```

This is a screenshot of what happens if you forgot to start the Nessus Agent on Linux:



The rescan of the Mac shows that Firefox is fixed.

Severity -	Name A
•	New Adobe Flash Player for Mac <= 29.0.0.113 (APSB18-08)
	New Adobe Flash Player for Mac <= 28.0.0.126 (APSB18-01)
	New Adobe Flash Player for Mac <= 28.0.0.137 Use-after-free Remote Code Execution (APSA18-01) (APSB1
	New Adobe Flash Player for Mac <= 28.0.0.161 (APSB18-05)
	New Adobe Flash Player for Mac <= 29.0.0.140 (APSB18-16)
	New Adobe Flash Player for Mac <= 29.0.0.171 Plugin ID: 105176
•	New Adobe Flash Player for Mac <= 27.0.0.187 (APSB17-42)

Vulnerabilities / Critical

◆ Back to Workbench

TOTAL PLUGINS: 3

Severity -	Name -
•	New Adobe Flash Player for Mac <= 29.0.0.113 (APSB18-08)
•	New CentOS 7: kernel (CESA-2017:1842) (Stack Clash)
•	New CentOS 7: kernel (CESA-2017:2930)



CentOS 7: kernel (CESA-2017:1842) (Stack Clash)

Description

An update for kernel is now available for Red Hat Enterprise Linux 7.

Red Hat Product Security has rated this update as having a security impact of Important. A Common Vulnerability Scoring System (CVSS) base score, which gives a detailed severity rating, is available for each vulnerability from the CVE link(s) in the References section.

The kernel packages contain the Linux kernel, the core of any Linux operating system.

Security Fix(es):

- * An use-after-free flaw was found in the Linux kernel which enables a race condition in the L2TPv3 IP Encapsulation feature. A local user could use this flaw to escalate their privileges or crash the system.

 (CVE-2016-10200, Important)
- * A flaw was found that can be triggered in keyring_search_iterator in keyring.c if type->match is NULL. A local user could use this flaw to crash the system or, potentially, escalate their privileges.

 (CVE-2017-2647, Important)
- * It was found that the NFSv4 server in the Linux kernel did not properly validate layout type when processing NFSv4 pNFS LAYOUTGET and GETDEVICEINFO operands. A remote attacker could use this flaw to soft-lockup the system and thus cause denial of service. (CVE-2017-8797, Important)

This update also fixes multiple Moderate and Low impact security issues :

* CVE-2015-8839, CVE-2015-8970, CVE-2016-9576, CVE-2016-7042, CVE-2016-7097, CVE-2016-8645, CVE-2016-9576, CVE-2016-9588, CVE-2016-9806, CVE-2016-10088, CVE-2016-10147, CVE-2017-2596, CVE-2017-2671, CVE-2017-5970, CVE-2017-6001, CVE-2017-6951, CVE-2017-7187, CVE-2017-7616, CVE-2017-7889, CVE-2017-8890, CVE-2017-8890, CVE-2017-9075, CVE-2017-8890, CVE-2017-9076, CVE-2017-8890, CVE-2017-9077, CVE-2017-9242, CVE-2014-7970, CVE-2014-7975, CVE-2016-9613, CVE-2016-9604, CVE-2016-9685

Output

Remote package installed: kernel-3.10.0-514.26.2.el7
Should be: kernel-3.10.0-693.el7

Remote package installed: kernel-headers-3.10.0-514.26.2.el7
Should be: kernel-headers-3.10.0-693.el7

Remote package installed: kernel-tools-3.10.0-514.26.2.el7
Should be: kernel-tools-3.10.0-693.el7

Remote package installed: kernel-tools-libs-3.10.0-514.26.2.el7
Should be: kernel-tools-libs-3.10.0-693.el7

Remote package installed: python-perf-3.10.0-514.26.2.el7
Should be: python-perf-3.10.0-693.el7

Severity •	State	Port	Assets
•	New	N/A	rstudio2.campus.pomona.edu



CentOS 7: kernel (CESA-2017:2930)

Description

An update for kernel is now available for Red Hat Enterprise Linux 7.

Red Hat Product Security has rated this update as having a security impact of Important. A Common Vulnerability Scoring System (CVSS) base score, which gives a detailed severity rating, is available for each vulnerability from the CVE link(s) in the References section.

The kernel packages contain the Linux kernel, the core of any Linux operating system.

Security Fix(es):

- * Out-of-bounds kernel heap access vulnerability was found in xfrm, kernel's IP framework for transforming packets. An error dealing with netlink messages from an unprivileged user leads to arbitrary read/write and privilege escalation. (CVE-2017-7184, Important)
- * A race condition issue leading to a use-after-free flaw was found in the way the raw packet sockets are implemented in the Linux kernel networking subsystem handling synchronization. A local user able to open a raw packet socket (requires the CAP_NET_RAW capability) could use this flaw to elevate their privileges on the system.

 (CVE-2017-1000111, Important)
- * An exploitable memory corruption flaw was found in the Linux kernel.

 The append path can be erroneously switched from UFO to non-UFO in ip_ufo_append_data() when building an UFO packet with MSG_MORE option. If unprivileged user namespaces are available, this flaw can be exploited to gain root privileges. (CVE-2017-1000112, Important)
- * A flaw was found in the Linux networking subsystem where a local attacker with CAP_NET_ADMIN capabilities could cause an out-of-bounds memory access by creating a smaller-than-expected ICMP header and sending to its destination via sendto(). (CVE-2016-8399, Moderate)
- * Kernel memory corruption due to a buffer overflow was found in brcmf_cfg80211_mgmt_tx() function in Linux kernels from v3.9-rc1 to v4.13-rc1. The vulnerability can be triggered by sending a crafted NL80211_CMD_FRAME packet via netlink. This flaw is unlikely to be triggered remotely as certain userspace code is needed for this. An unprivileged local user could use this flaw to induce kernel memory corruption on the system, leading to a crash. Due to the nature of the flaw, privilege escalation cannot be fully ruled out, although it is unlikely. (CVE-2017-7541, Moderate)
- * An integer overflow vulnerability in ip6_find_1stfragopt() function was found. A local attacker that has privileges (of CAP_NET_RAW) to open raw socket can cause an infinite loop inside the ip6_find_1stfragopt() function. (CVE-2017-7542, Moderate)

Output

New

N/A

```
Remote package installed : kernel-3.10.0-514.26.2.el7
 Should be
                            : kernel-3.10.0-693.5.2.el7
 Remote package installed : kernel-headers-3.10.0-514.26.2.el7
 Should be
                            : kernel-headers-3.10.0-693.5.2.el7
 Remote package installed : kernel-tools-3.10.0-514.26.2.el7
 Should be
                             : kernel-tools-3.10.0-693.5.2.el7
 Remote package installed : kernel-tools-libs-3.10.0-514.26.2.el7
 Should be
                             : kernel-tools-libs-3.10.0-693.5.2.el7
 Remote package installed: python-perf-3.10.0-514.26.2.el7
Should be: python-perf-3.10.0-693.5.2.el7
Severity -
          State
                        Port
                                            Assets
```

rstudio2.campus.pomona.edu