



Product Support Notice

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PSN # PSN005936u

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Original publication date: 15-Dec-21. This is Issue #06, published date: 04-Apr-2022. Severity/risk level High Urgency Immediately

Name of problem

PSN005936u - Avaya Meetings® Streaming and Recording Log4j vulnerabilities (CVE-2021-44228)

Products affected

Avaya Meetings® Streaming and Recording (previously known as Equinox® Streaming and Recording), All Releases
Avaya Meetings® Recording Gateway (previously known as Equinox® Recording Gateway), All Releases

Problem description

Avaya is aware of the recently identified Apache Log4j ([CVE-2021-44228](#), [CVE-2021-45046](#), [CVE-2021-45105](#), [CVE-2021-44832](#), [CVE-2021-4104](#), [CVE-2022-23302](#), [CVE-2022-23305](#), [CVE-2022-23307](#)) and is conducting impact assessments across its portfolio, identifying opportunities for temporary mitigations, if possible, and developing plans for remediation. Reference the *Avaya Product Security - [Apache Log4j Vulnerability - Impact for Avaya products](#)* on support.avaya.com for updates.

Avaya Equinox/Meetings Streaming and Recording

- Equinox® Streaming and Recording releases 9.1 FP5 and earlier are not impacted by the Log4j2 vulnerabilities (CVE-2021-44228, CVE-2021-45046, CVE-2021-45105, CVE-2021-44832, CVE-2021-4104, CVE-2022-23302, CVE-2022-23305, CVE-2022-23307).
- Equinox® Streaming and Recording releases 9.1 FP8 and later, and Meetings® Streaming and Recording releases 9.1 FP11 and later have a component vulnerable to the exploit CVE-2021-44228 only: Manager.

Avaya has released a security update to address this. Reference the resolution section of this PSN.

Avaya Equinox/Meetings Recording Gateway

All Avaya Equinox/Meetings Recording Gateway releases (9.0 -> 9.1.12 SP1) have a component vulnerable to the exploit CVE-2021-44228 only: Web Collaboration Server.

Avaya has released a security update to address this. Reference the resolution section of this PSN.

Please only follow documented procedures described in this PSN to resolve this issue.

This PSN will be updated as more information is available.

Resolution

Avaya Equinox/Meetings Streaming and Recording

- Avaya Equinox® Streaming and Recording releases 9.1 FP5 and earlier are not impacted by this vulnerability, hence no action is needed for these versions.
- For Equinox® Streaming and Recording releases 9.1 FP8 and later, and Meetings® Streaming and Recording releases 9.1 FP11 and later, Avaya has released a Security Update to address Log4j2 vulnerability CVE-2021-44228, updating log4j to version 2.17.1. Please refer to the Patch Notes section for the 9.1.10/9.1.11/9.1.12 download links.
 - Note: Avaya Equinox® Streaming and Recording releases 9.1 FP8 through 9.1.9 SP1 will need to upgrade to release 9.1 FP10 or greater with the latest patch / Service Pack, and then apply the specific log4j security update to mitigate the problem.
- Alternatively, customers are encouraged to upgrade to the recently released Meetings Server R9.1 FP13 which includes the above fixes for the vulnerabilities. For details, please refer to the [Meetings Server R9.1 FP13](#) download page.

Avaya Equinox/Meetings Recording Gateway

Avaya has released a Security Update to address Log4j2 vulnerability CVE-2021-44228, updating log4j to version 2.17.1. Please refer to the Patch Notes section for the 9.1.10/9.1.11/9.1.12 download links

- Note: Avaya Equinox® Recording Gateway releases 9.0 through 9.1.9 SP1 will need to upgrade to release 9.1 FP10 or greater with the latest patch / Service Pack, and then apply the specific log4j security update to mitigate the problem.

Alternatively, customers are encouraged to upgrade to the recently released Meetings Server R9.1 FP13 which includes the above fixes for the vulnerabilities. For details, please refer to the [Meetings Server R9.1 FP13](#) download page.

Workaround or alternative remediation

n/a

Remarks

PSN Revision History:

Issue 1 – December 15, 2021: Initial publication.

Issue 2 – December 17, 2021: Updated version information.

Issue 3 – December 21, 2021: Updated PSN name, added SW Fix details in the Resolution section, updated the Workaround section and added Patch notes.

Issue 4 – January 7, 2022 : Updated CVE details.

Issue 6 – February 23, 2022: Updated with new CVEs information, updated sections: Resolution, Workaround and Patch Notes.

Issue 7 – April 4, 2022: Updated to clarify that Meetings Server release 9.1.13 includes the security update for these vulnerabilities.

Patch Notes

The information in this section concerns the patch, if any, recommended in the Resolution above.

Backup before applying the patch

Avaya Equinox/Meetings Streaming and Recording

The Manager backup is performed daily. It's always a good idea to perform a backup prior to an update, so if there are changes in the Manager since the previous day, follow documented procedures to back up the Manager.

Avaya Equinox/Meetings Recording Gateway

Always – utilize VM snapshot; however, multiple copies of snapshots should not be stored on the VM.

Best practice: Wait for a few days (up to a week) to see that the new version performs well and is stable, and then delete all snapshots.

Coordinate and perform these upgrades at a time interval when the conferencing system is not in use.

Download

Obtain software from <https://plds.avaya.com/>.

Avaya Equinox/Meetings Streaming and Recording

- EQSR0000078 – Avaya Meetings Streaming / Recording Manager 9.1.10 Log4j Vulnerability Update 2
- EQSR0000079 – Avaya Meetings Streaming / Recording Manager 9.1.11 Log4j Vulnerability Update 2
- EQSR0000080 – Avaya Meetings Streaming / Recording Manager 9.1.12 Log4j Vulnerability Update 2
- EQSR0000081 – Avaya Meetings Streaming / Recording Windows Sys.Components 9.1.10 Log4j Update

Avaya Equinox/Meetings Recording Gateway

- EQRGW000020 – Avaya Meetings Recording GW 9.1.10 Log4j Vulnerability - Security Update 2
- EQRGW000021 – Avaya Meetings Recording GW 9.1.11 SP1 Log4j Vulnerability - Security Update 2
- EQRGW000022 – Avaya Meetings Recording GW 9.1.12 Log4j Vulnerability - Security Update 2

Software install instructions

Service-
interrupting?

Avaya Equinox/Meetings Streaming and Recording

No

For the 9.1.10 Security Update, there is a new Windows System Component, and a new Manager. For both the 9.1.11 and 9.1.12 Security Updates, there is a new Manager component.

Both the Windows System Component and Manager are upgraded using the **assr_installer** utility included on the server. To upgrade, perform the following on your Avaya Meetings Streaming and Recording appliance which hosts the Manager:

1. Log onto the server
2. Download the update(s) (delivered as a ZIP file)
3. Open a command prompt window
4. Navigate to the folder where you downloaded the component
5. Issue the command: `assr_installer.exe <zip>`

Avaya Equinox/Meetings Recording Gateway

For Upgrades from prior versions, first complete the upgrade or installation and then apply the security update.

Refer to the [Administering Avaya Meetings Management](#) – Chapter 15: Maintaining your Videoconferencing Network.

Verification

Avaya Equinox/Meetings Streaming and Recording

- Verify version information:
 - For the 9.1.10 service pack, the Windows System Component version is **9.1.10.004**, and the Manager version is **9.1.10.102**
 - For the 9.1.11 service pack, the Manager version is **9.1.11.101**
 - For the 9.1.12 service pack, the Manager version is **9.1.13.003**
- Performing basic sanity testing of 5-10 recordings / broadcasts is recommended to ensure normal system operation
- Verify that all logs in the **C:\Program Files\Apache Software Foundation\TomcatXXX\logs** are being generated properly (debug, rest, audit, polling, warn). Note, the Tomcat version is different from release 9.1.10 to releases 9.1.11 and 9.1.12

Avaya Equinox/Meetings Recording Gateway

The Log4j Vulnerabilities are not directly reproducible. Verify the Software Security Update by verifying that the relevant .jar files have been updated.

Before Update:

```
/opt/avaya/WCS/jars/log4j-api-2.3.jar  
/opt/avaya/WCS/jars/log4j-core-2.3.jar
```

After Update:

```
/opt/avaya/WCS/jars/log4j-core-2.17.1.jar  
/opt/avaya/WCS/jars/log4j-api-2.17.1.jar
```

Failure

Avaya Equinox/Meetings Streaming and Recording: Re-install previous version of Manager.

Avaya Equinox/Meetings Recording Gateway: Return to backup – VM snapshot.

Patch uninstall instructions

No uninstall. Re-install previous version of Manager / backup.

Security Notes

The information in this section concerns the security risk, if any, represented by the topic of this PSN.

Security risks

Reference <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2021-44228>

Reference <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2021-45046>

Reference <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2021-45105>

Reference <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2021-44832>

Reference <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2021-4104>

Reference <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2022-23302>

Reference <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2022-23305>

Reference <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2022-23307>

Reference <https://logging.apache.org/log4j/2.x/security.html>

Reference <https://logging.apache.org/log4j/1.2/>

Avaya Security Vulnerability Classification

Reference www.avaya.com/emergencyupdate

Mitigation

As noted in this PSN.

If you require further information or assistance please contact your Authorized Service Provider, or visit support.avaya.com. There you can access more product information, chat with an Agent, or open an online Service Request. Support is provided per your warranty or service contract terms unless otherwise specified in the Avaya support [Terms of Use](#).

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