Product Support Notice

PSN #	PSN005389u				
Original publication date: 11 April 2019. This is Issue #01 Publication date: 11 April 2019		Severity/risk level	Medium	Urgency	When Convenient

Name of problem

IP Office & IP Office Contact Center Dell R210/R220/R230 Server vulnerabilities (Spectre/Meltdown/L1TF)

Products affected

IP Office Dell R230 Servers:

302786 - R210 II XL SRVR IPO UC
302787 - R210 II XL SRVR IPO FRANCE TELECOM
302788 - R210 II XL SRVR IPO SE EXP
380226 - R220 XL SERVER IP OFFICE UNIFIED COMMUNICATIONS
380224 - R220 XL SERVER IP OFFICE FRANCE TELECOM
380225 - R220 XL SERVER IP OFFICE SERVER EDITION EXPANSION
390081 - R230 XL SERVER IP OFFICE UNIFIED COMMUNICATIONS
390082 - R230 XL SERVER IP OFFICE FRANCE TELECOM

IP Office Contact Center Dell R230 Server

306626 - R210 II XL SERVER IP OFFICE CONTACT CENTER
380226 - R220 XL SRVR IPOCC
390083 - R230 XL SERVER IP OFFICE CONTACT CENTRE

Problem description

Intel has identified security vulnerabilities in the BIOS firmware used on the IPO Dell R210/R220/R230 series of platforms. These issues have been referred to as Spectre, Meltdown and L1TF. These fixes are related to the issues found in the Intel Management Engine and Trusted Execution Engine.

The following are links to the three vulnerabilities addressed by the BIOS update:

http://www.cve.mitre.org/cgi-bin/cvename.cgi?name=2017-5706

http://www.cve.mitre.org/cgi-bin/cvename.cgi?name=2017-5709

https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=2017-5715

https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2018-3639

https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2018-3640

Resolution

Dell has released the following BIOS version 2.10.0 to resolve the issue on the R210 II.

The EXE file will be used to update all R210 II servers and is available for download on Avaya Support portal in PLDS

This procedure is service interrupting and requires a system restart. Please plan accordingly.

A monitor, keyboard and mouse directly connected to the server are needed to perform this procedure.

Upgrade Instructions

File Format:Non-Packaged
File Name:PER210II_021000.exe
File Size: 8 MB
MD5: c5afc317df972eda55c59663b915e1ec
SHA1: e52c30c6f3cd1d633362eaf4da162f1fbd99b022
SHA-256: 8fa0445c3ccf2c15335fd024af7d17f4c5281b513d1a3457ab715340b6ee0fd1

IP Office and IPOCC Installation Instructions:

NOTE: You must provide a DOS bootable media (use http://rufus.akeo.ie/ to create the bootable dos key), such as a USB key. This executable file does not create the DOS system files.

Using a Windows PC:

1. Download the PER210II_021000.exe file from PLDS.
2. Copy the file to a USB device that has been formatted as a DOS bootable media (see note above).
3. Plug in the USB device to the USB port on the front of the server.
4. **Shutdown the IPO Server.**
    a. Log in to the server's web configuration pages.
    b. Select the System page.
    c. Click **Shutdown**. The menu prompts you to confirm the action.
    d. Click **Yes** to confirm that you want to proceed with the shutdown.
    The login page appears again. Do not attempt to log in again immediately.
    After a few minutes, typically no more than 2 minutes, the server shuts down.
5. **Shutdown the IPOCC Server.**
    a. Log in to the IPOCC server.
    b. Select the Windows Start Menu.
    c. Select **Shutdown**.
6. **Press the power button to restart the server**
7. **Boot to the USB device (F11 to enter the boot manager)**
8. Run the executable under DOS. Follow the instructions provided by the flash utility.

Dell has released the following BIOS version 1.10.3 to resolve the issue on the R220.

The EXE file will be used to update all R220 servers and is available for download on Avaya Support portal in PLDS

This procedure is service interrupting and requires a system restart. Please plan accordingly.

A monitor, keyboard and mouse directly connected to the server are needed to perform this procedure.

File Format:Non-Packaged
File Name:R220-011003.exe
File Size: 8 MB
MD5: d08e9316a57618ec18e859c1c8327c3d
SHA1: adc7f765891b86a4b036071768c4e3eacb00699d
SHA-256: d025b2a4192d757f16c093fea094f5a380ccc4d04b25264ce7527c714fe2dae0

Installation

NOTE: You must provide a DOS bootable media (use http://rufus.akeo.ie/ to create the bootable dos key), such as a USB key. This executable file does not create the DOS system files.

Using a Windows PC:

1. Download the R220-011003.exe file from PLDS.
2. Copy the file to a USB device that has been formatted as a DOS bootable media (see note above).
3. Plug in the USB device to the USB port on the front of the server.
4. **Shutdown the IPO Server.**
    a. Log in to the server's web configuration pages.
    b. Select the System page.
    c. Click **Shutdown**. The menu prompts you to confirm the action.
    d. Click **Yes** to confirm that you want to proceed with the shutdown.
    The login page appears again. Do not attempt to log in again immediately.
    After a few minutes, typically no more than 2 minutes, the server shuts down.
5. **Shutdown the IPOCC Server.**
    a. Log in to the IPOCC server.
    b. Select the Windows Start Menu.
    c. Select **Shutdown**.
6. **Press the power button to restart the server**
7. **Boot to the USB device (F11 to enter the boot manager)**
8. Run the executable under DOS. Follow the instructions provided by the flash utility.

Dell has released the following BIOS version 2.5.0 to resolve the issue on the R230.

The EFI will be used to update all R230 servers and is available for download on Avaya Support portal in PLDS

This procedure is service interrupting and requires a system restart. Please plan accordingly.

A monitor, keyboard and mouse directly connected to the server are needed to perform this procedure.

Upgrade Instructions

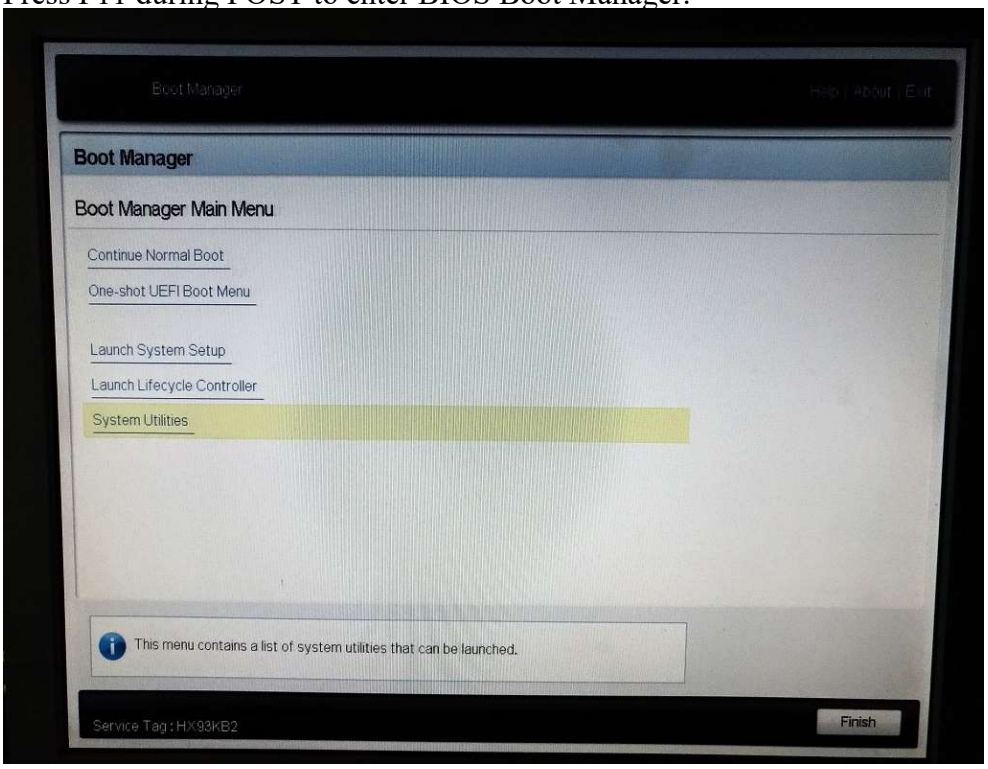
File Format:Hard-Drive
File Name: R330-020500.efi
File Size: 6 MB
MD5: 9f783b77ea0e845d7c643b4cc4f1e621
SHA1: e389266aa059f69ecf9ae8f2d3686aca6d8124e3
SHA-256: 83b3b607303f60543131ad5f4f9d7bd435db96b50be1f76b2850071cce23c855

IP Office and IPOCC Installation Instructions:

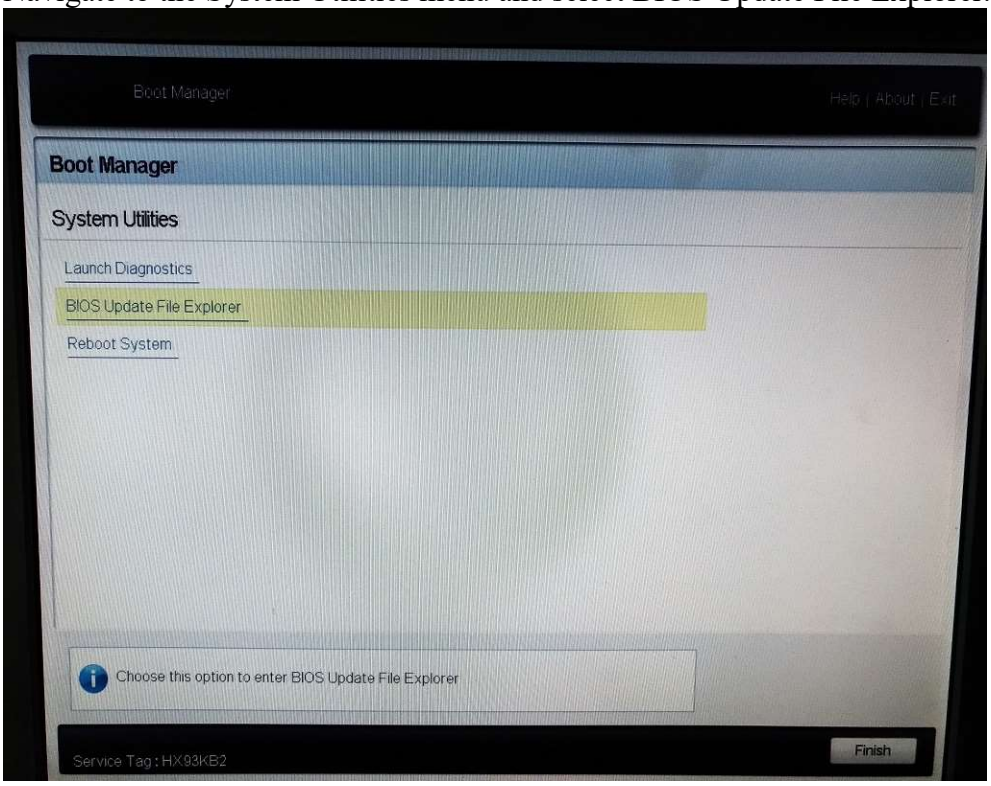
Using a Windows PC:

9. Download the R330-020500.efi file from PLDS.
10. Copy the file to a USB device that has been formatted with FAT32.
11. Plug in the USB device to the USB port on the front of the server.
12. **Shutdown the IPO Server.**
    a. Log in to the server's web configuration pages.
    b. Select the System page.
    c. Click **Shutdown**. The menu prompts you to confirm the action.
    d. Click **Yes** to confirm that you want to proceed with the shutdown.
    The login page appears again. Do not attempt to log in again immediately.
    After a few minutes, typically no more than 2 minutes, the server shuts down.
13. **Shutdown the IPOCC Server.**
    a. Log in to the IPOCC server.
    b. Select the Windows Start Menu.
    c. Select **Shutdown**.
14. Press the power button to restart the server.

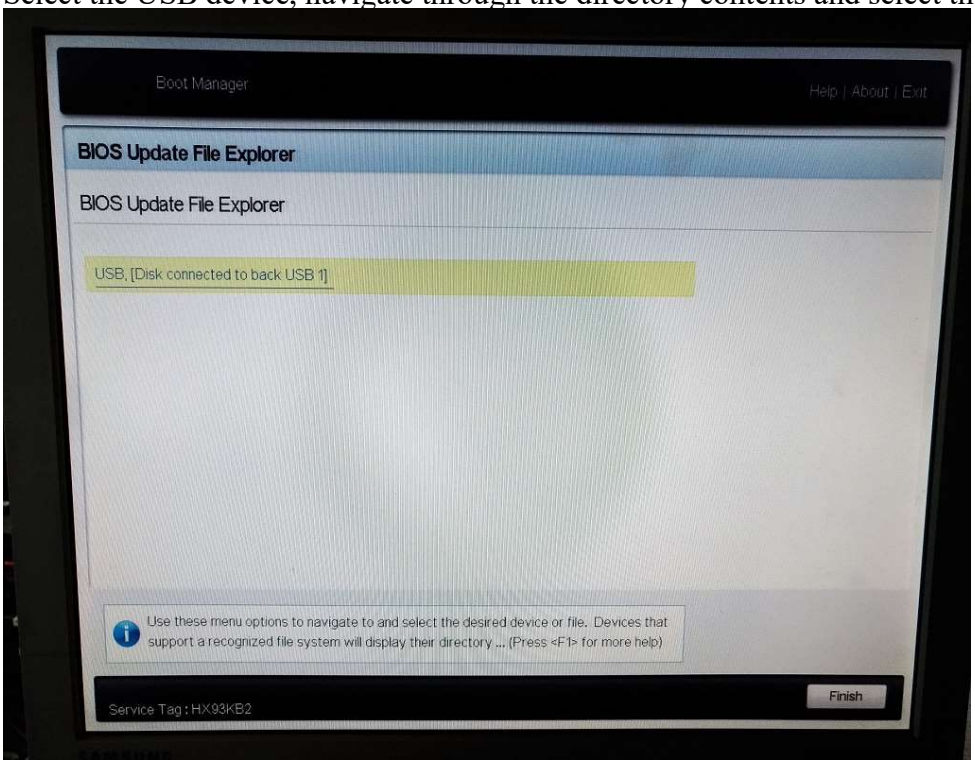
15. Press F11 during POST to enter BIOS Boot Manager.

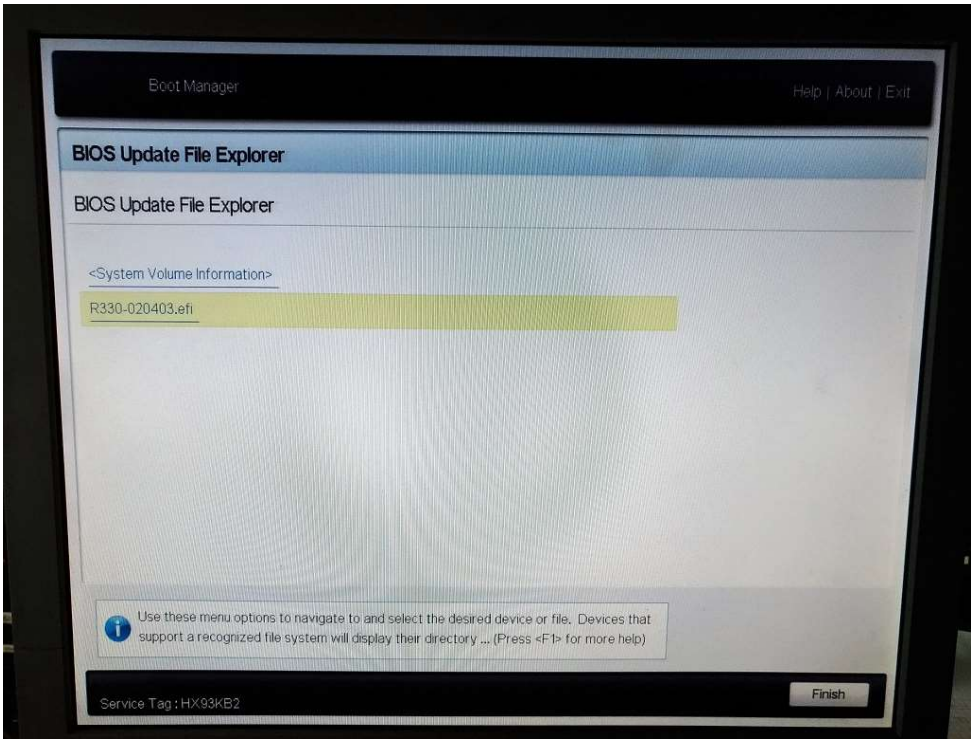


16. Navigate to the System Utilities menu and select BIOS Update File Explorer.

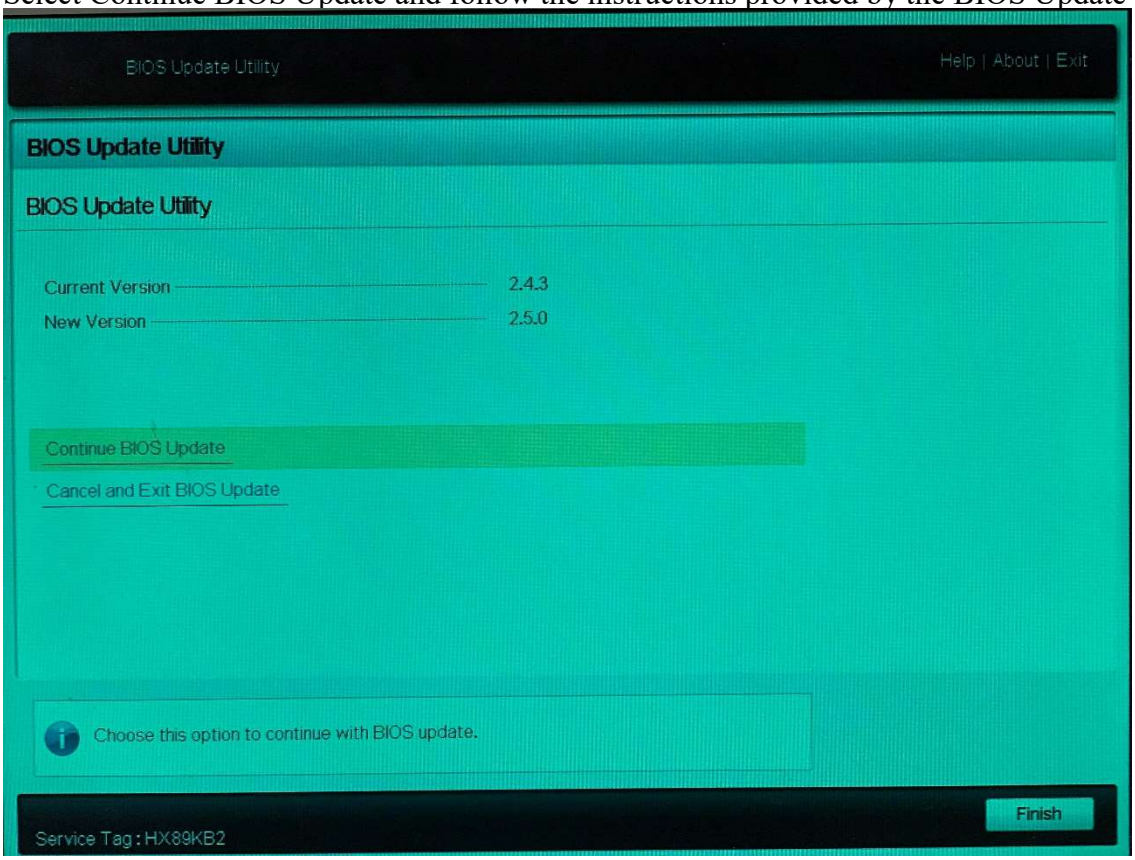


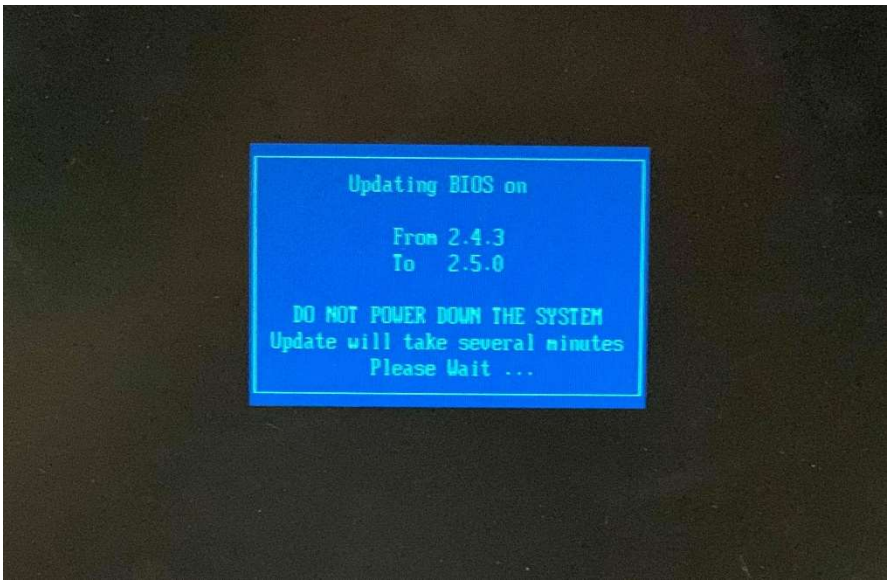
17. Select the USB device, navigate through the directory contents and select the executable (.efi).



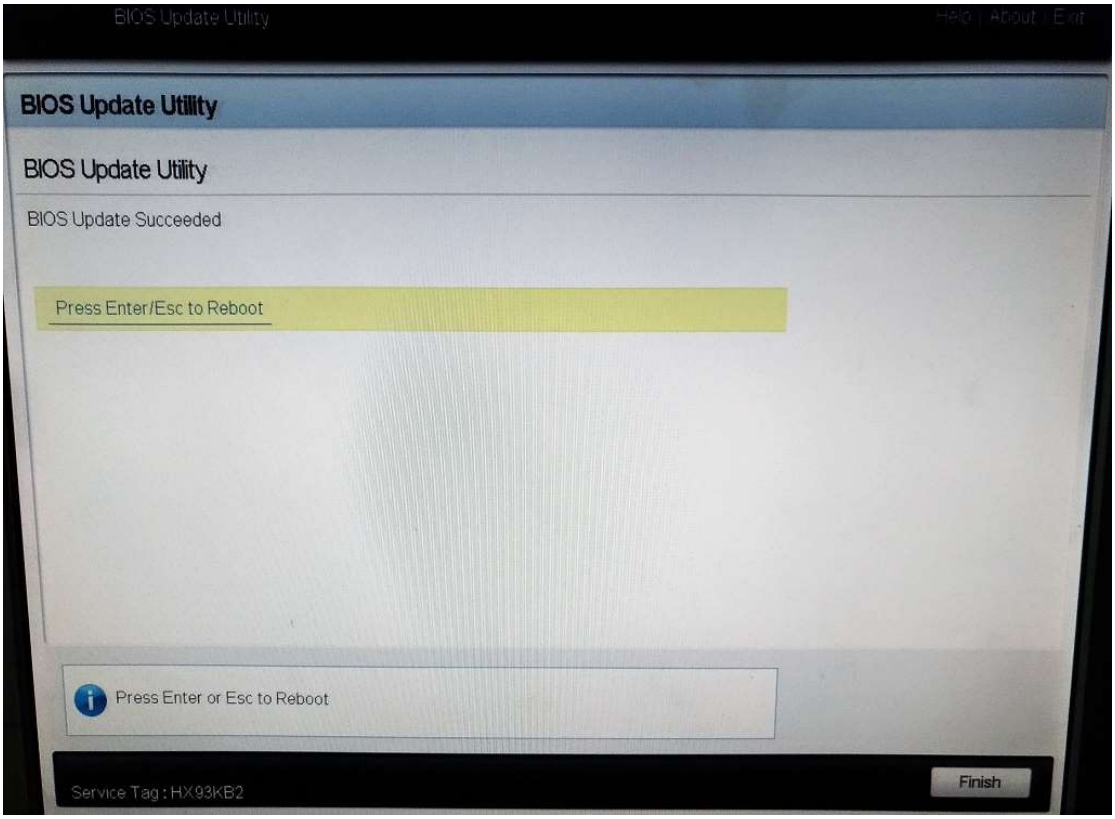


18. Select Continue BIOS Update and follow the instructions provided by the BIOS Update utility.



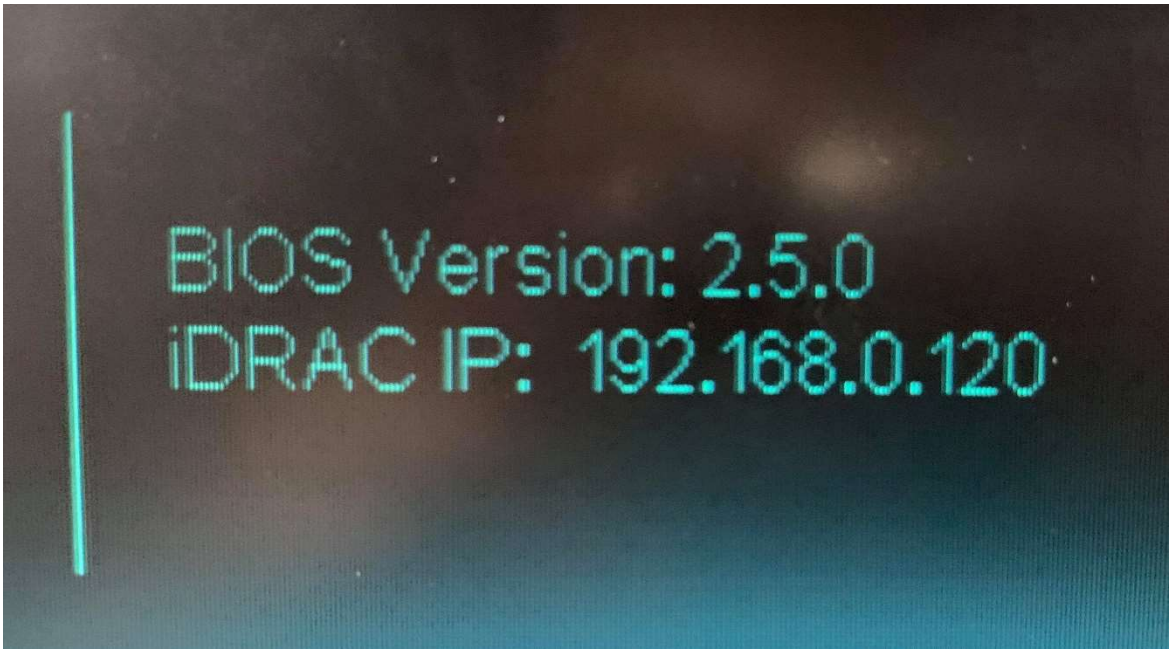


19. Follow the instructions to reboot the server.



BIOS Verification Steps

After the BIOS has been successfully upgraded, observe the BIOS version displayed on the system console during the restart.



Workaround or alternative remediation

N/A

Remarks

Avaya has completed testing on both the IP Office & IPOCC Dell R2xx servers. No issues were found and the upgrades to the BIOS went smoothly. It is recommended that customers apply this update as soon as possible.

Patch Notes

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

Backup before applying the patch	
n/a	
Download	
https://support.avaya.com/downloads/download-details.action?contentId=C2019441416169080_8&productId=P0160&releaseId=11.0.x	
Patch install instructions	**Service-interrupting?**
n/a	Yes
Verification	
n/a	
Failure	
n/a	
Patch uninstall instructions	
n/a	

Security Notes

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

Security risks

This PSN specifically addresses a security risk in the Dell Server BIOS as described in the following Dell notice:

http://www.dell.com/support/home/us/en/19/drivers/driversdetails?driverId=WDY2P

Avaya Security Vulnerability Classification

Medium

Mitigation

Upgrade BIOS as soon as possible.

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.