BIOS Version 2.1.8 for Dell EMC PowerEdge Servers: R740, R740XD, R640, and R940.

And for Dell EMC Precision 7920 Rack Workstation

Release Notes
Release Notes

BIOS
Basic Input / Output System (BIOS) facilitates the hardware initialization process and transitions control to the Operating System (OS).

Current version
2.1.8

Release date
May 2019

Previous version
2.1.7

Release summary
An issue is resolved where the POST and Lifecycle Controller logs displayed error messages (UEFI0339, UEFI0058, UEFI0108, and MEM0001) because of a Memory Training Failure in PowerEdge servers whose BIOS is updated to 2.1.6 or 2.1.7. For more information about specific items added and resolved in this BIOS version, see the Fixes sections.

Priority and recommendations
Urgent—Dell EMC highly recommends applying this update as soon as possible. The update contains changes to improve the reliability and availability of your Dell EMC system.

Supported devices and platforms
The PowerEdge R740, R740XD, R640, and R940 servers. Also, for the Precision 7920 Rack workstation.

New and enhanced features
None for this release.

Fixes
After upgrading the BIOS versions to 2.1.6 and 2.1.7 in PowerEdge servers (that have Low Core Count (LCC) and High Core Count (HCC) processors), the POST and Lifecycle Controller logs may display the following messages because of a Memory Training Failure:

- **UEFI0339**—The Dual Inline Memory Module (DIMM) in the memory slot `<slotName>` is disabled because of initialization errors caused by uncorrectable memory errors, invalid configuration, and others.
- **UEFI0058**—Uncorrectable Memory Error has occurred because a Dual Inline Memory Module (DIMM) is not functioning.
- **UEFI0108**—One or more memory errors have occurred on memory slot: `<slotName>`.
- **MEM0001**—Multi-bit memory errors detected on a memory device at location(s) `<locations>`.

Known issues
None for this release.

Important notes
None for this release.
Features and fixes in previous releases

Version: 2.1.7

Release Date
April 2019

What’s new
None for this release.

Fixes

When the CPU Power Management is set to OS DBPM on the System BIOS Settings page, the status of Technology attribute in the Power Management section of a processor is indicated as Unknown when used on an ESXi OS. However, in an ideal scenario, the status will be indicated as ACPI P-states, ACPI C-states. This issue is not limited to ESXi OS. Other OSs may also face the CPU power and performance issues because of this issue.

April 2019

Version: 2.1.6

Release Date
April 2019

What’s new

• Added support for the second generation Intel® Xeon® Processor Scalable Family.
• Updated the Processor and Memory eference Code to Production Candidate for second generation Intel® Xeon® Processor Scalable Family to MR1.
• Updated the Processor Microcode to version 0x5A for Intel® Xeon® Processor Scalable Family.
• Updated the Processor Microcode to version 0x1C for second generation Intel® Xeon Processor Scalable Family.
• Updated the Intel Trusted Execution Technology (Intel TXT) BIOS Authenticated Code Module (ACM) to version 1.7.1.
• Updated the Intel Management Engine firmware to version 04.01.04.251.
• Updated the HPC (High Performance Computing) Workload Profile.
• Added BIOS setting for Intel Adaptive Double DRAM Device Correction (ADDC) in the BIOS Settings menu.
• Added support for the HTTP Delete Method.

Fixes

• Unable to view the log data in the Lifecycle Log files for a few error conditions in the Lifecycle Controller Pre-OS Utility (F10). The following message is displayed—Unable to display Lifecycle Log.
• The TPM PCR1 value is changed after a hardware component is added or removed.
• Machine check that decodes to MC0 (instruction fetch, internal error) with the last bytes of the Status value being F0150. The MCE can also be a combination of MC0 along with MC3 (Internal timer, 3-strike Watchdog), or even MC0, MC3, and MC4 (copy of MC3). Fix is included in the Processor Microcode to version 0x5A for Intel Xeon Processor Scalable Family.
• When the boot mode=BIOS and the USB drive is a part of the HDD list: The ipmitool -I -H -U -P chassis bootdev disk options=persistent IPMI command run to modify the boot sequence also modifies the HDD sequence.
• When booting from an FCOE by using a QLogic 41262 CNA adapter, the BIOS RSoD (Red Screen On Display) may be displayed after applying the server template during boot.
• When changing the BIOS settings by clicking Configuration → Server Configuration Profile on the iDRAC GUI, updated the system behavior to complete both the following tasks by running a single job (single SCP file):
  o Change the boot mode from BIOS to UEFI
  o Change the UEFI network settings
- Secure Boot variables were being measured twice (SecureBoot, PK, KEK, db, and dbx) for Trusted Platform Module (TPM) 2.0 version.
- When a BOSS card is installed, a bus fatal error and/or PCIe training error may be reported.
- Power button on the right control panel does not appear to immediately power on a server.
- Microsoft Windows Installer and Windows Boot Loader may fail to start.
- Some medium and minor issues were fixed.

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**Version: 1.6.13**

**Release Date**
January 2019

**What’s new**
None for this release.

**Fixes**
Fixed an issue related to NVDIMM-N that have specific configurations.

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**Installation instructions**

1. Go to www.dell.com/support.
2. In the **Enter a Service Tag, Serial Number** box, type the product name. For example, PowerEdge R830.
3. Select your product from the list that is displayed.
4. Click **Drivers & downloads**.
5. From the **Category** drop-down menu, select **BIOS**.
6. In the **Name** column, expand the hyperlinked BIOS title.
   a. To view information about earlier versions, click **Older versions**.
7. To view information about compatible systems and installation instructions, click **View full driver details**.
8. On the **Driver Details** page, scroll down and expand **Installation instructions**.
   Instructions about downloading and installing Update Packages by using methods such as DRMK, EFI, Linux, and Windows is displayed.
9. Follow the relevant instructions to update the BIOS.

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**Additional resources and support**

**Access documents using direct links**
You can directly access the documents by using the following links:

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<td>The Dell EMC support site</td>
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<td><a href="http://www.dell.com/idracmanuals">www.dell.com/idracmanuals</a></td>
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**Access documents using product search**
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4. Click Manuals & documents.

Contact Dell EMC

Dell EMC provides several online and telephone-based support and service options. Availability varies by country/region and product, and some services may not be available in your area. To contact Dell EMC for sales, technical support, or customer service issues, go to www.dell.com/contactdell.

If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or the product catalog.