

**Dell Chassis
Management
Controller (CMC)
Version 2.0 for Dell
PowerEdge VRTX**

Release Notes



Release Type and Definition

The Dell Chassis Management Controller (CMC) Version 1.35 for Dell PowerEdge VRTX is a System Management hardware and software solution for managing the Dell PowerEdge VRTX chassis.

Version

2.0

Release Date

December 2014

Previous Version

1.36

Importance

RECOMMENDED: Dell recommends applying this update during your next scheduled update cycle. The update contains feature enhancements or changes that will help keep your system software current.

Platform(s) Affected

Dell Chassis Management Controller (CMC) for Dell PowerEdge VRTX is supported on the following system:

- PowerEdge VRTX

What is Supported?

License Requirements

The CMC supports software licensing to use advanced systems management features. For more information about the license requirements, see the *Dell Chassis Management Controller for Dell VRTX User's Guide* available at the support site.

Supported Web Browsers for CMC for Dell PowerEdge VRTX

- Microsoft Internet Explorer 9
- Microsoft Internet Explorer 10
- Microsoft Internet Explorer 11
- Safari version 6.0
- Safari version 7.0
- Mozilla Firefox version 29
- Mozilla Firefox version 30
- Google Chrome version 33
- Google Chrome version 34

Supported platforms

M630, M520, M620, and M820 servers

Supported Server Modules

- Mainboard firmware: 2.00 or later
- iDRAC7 Version: 1.66.56 or later
- iDRAC8 Version: 2.05.05 or later (M630 Servers)
- PowerEdge M520 BIOS Version: 2.1.3 or later
- PowerEdge M620 BIOS Version: 2.2.7 or later
- PowerEdge M820 BIOS Version: 2.0.24 or later
- PowerEdge M820 BIOS Version: 0.3.35 or later

What's New?

Release 2.0

- 13th generation M630 Blade Server enablement for VRTX Chassis.
- 1600W PSU support.
- Broadcom 1GE quad-port NDC supported on M630 for VRTX Chassis.
- Emulex ARI NDC and Mezzanine cards support on M630 for VRTX Chassis.
- Intel 1G and NDC support on M630 for VRTX Chassis.
- Option to use an external library (CIFS/NFS directory created by the sysadmin) for update repositories and profiles.
- Option to see and use captured profiles stored on an external library.
- Assign a profile in a library to a slot for Quick Deploy of Profiles.
- 13G COMMs card Firmware and Driver Refresh.
- ARI support for COMMs Cards.
- IO identity Feature support.
- CMC signed image firmware update verification.

Fixes

Release 1.36

- Fixed an issue in the CMC graphical user interface to allow editing a virtual disks policy while in Fault Tolerant (dual PERC) mode.

Release 1.35

- Fixed an issue in RACADM related to alert event filter configuration.
- Fixed an issue in CMC web interface related to **Chassis OverView-> Alerts->Chassis Events** page. The **Chassis Events** page was not loading on the web interface due to certain alert configuration settings that were not working with the following filters: System-SEC-Warning,

Audit-LIC-Critical, Audit-LIC-Warning and Audit-LIC-Informational. This issue has been fixed in this Release.

Note: After updating to CMC 1.35 firmware version, verify the CMC alert configuration settings on the Chassis Event's page.

Release 1.31

- Occasional occurrences of older chassis log messages related to storage.

Release 1.30

- Telnet and SSH access issues with VLAN enabled.
- SNMP walk when traversing certain OIDs.
- PK authentication public key upload issue.
- Time zone setting in CMC graphical user interface. Fixed an issue in RACADM related to alert event filter configuration.

Important Notes

- It is recommended not to downgrade CMC or Mainboard firmware below the supported versions mentioned in this release notes, since previous versions of CMC and Mainboard do not support SPERC disable option.
- When the second SPERC is in the disabled mode, if a CMC with firmware version 1.30 or 1.31 is inserted into the chassis, then update the CMC firmware to 1.35 and run the options to disable the PERC again.
- The shared hard disk drives (HDDs) and PCIe cards are managed by the CMC and are not visible to the operating system in the server modules, until the HDDs and PCIe cards are mapped by using the CMC web interface. For instructions about mapping PCIe cards and managing the storage subsystem, see the *Chassis Management Controller for PowerEdge VRTX User's Guide* available at the support site.
- All the server modules must be turned off before updating the firmware for chassis infrastructure and SPERC. CMC firmware can be updated while the servers are turned on.
- Some advanced features require CMC enterprise license. For more information about the CMC licenses, see the *Chassis Management Controller for PowerEdge VRTX Version User's Guide* available at the support site.
- Before updating the storage component using the web interface, make sure that the browser's Cookies are enabled.
- PERC storage rebuild may take more time when more number of I/O requests are processed, and could also make CMC and the TTY log to be out of sync for a short period of time.
- In fault-tolerant (Redundant) mode, the controller associated with virtual disks or physical disk drives is the active controller.
- When saving Server Profile under "**Server Overview > Setup > Profiles**", the list of characters that are not supported for the Profile Name include the characters hash(#), comma(,), and question mark(?).
- You may see an impact in the performance of the Graphical User Interface with this release of CMC. The performance impact varies by configuration, GUI page, and system load.

Known Issues

Issue 1:

Description

XWKGY_Intel10G card shows Flex disabled address after racresetcfg of CMC in Network Device Page and OS.

Resolution

Virtual reseal or Physical reseal of the server.

Versions/Systems Affected

All CMC versions including CMC 2.0 for Dell PowerEdge VRTX and PowerEdge servers with iDRAC7 or earlier.

Issue 2:

Description

Io-Identity values are displayed partially in the cmc getmacaddress -c all for 8F6NV(Intel).

Resolution

None

Versions/Systems Affected

CMC 2.0 for Dell PowerEdge VRTX and servers with Intel adapetrs Intel(R) 10G 2P X520-k bNDC and Intel 10GbE/FCoE Dual KR X-520.

Issue 3:

Description

RACADM displays non ISCSI MAC addresses after using ISCSI filter in "getmacaddress -m server-x -t iscsi" command.

Resolution

None

Versions/Systems Affected

All CMC versions including CMC 2.0 for Dell PowerEdge VRTX.

Issue 4:

Description

VLAN settings from the leader chassis are not propagating to member chassis.

Resolution

Login to each member chassis CMC GUI and set the VLAN for iDRAC (**Server Overview** -> **Setup** -> **VLAN** page).

Versions/Systems Affected

All CMC versions including CMC 2.0 for Dell PowerEdge VRTX and PowerEdge servers with iDRAC7 or earlier.

Issue 5:

Description

After Shared PERC8 controller update, RAID related operations may take longer to report status..

Resolution

Wait for the operation status to report.

Versions/Systems Affected

CMC version 2.0 for Dell PowerEdge VRTX.

Limitations

None for this release.

Installation

Prerequisites

Before setting up your CMC environment, download the latest version of CMC firmware for PowerEdge VRTX from the Dell Support Website at dell.com/support/. Also, make sure that you have the Dell Systems Management Tools and Documentation DVD that is included with your system.

Installation Procedure

1. In the CMC web interface, click **Chassis Overview**, and then click **Update**.
2. On the **Firmware Update** page, in the **CMC Firmware** section, select the required components under the **Update Targets** column for the CMC or CMCs (if a standby CMC is present) you want to update, and then click **Apply CMC Update**.
3. In the **Firmware Image** box, type the path to the firmware image file on the management station or shared network, or click **Browse** to browse through to the file location. The default name of the CMC firmware image file is vrtx_cmc.bin.
4. Click **Begin Firmware Update**, and then click **Yes**. The **Firmware Update Progress** section displays information about the firmware update status.

For more information, see the *Chassis Management Controller for PowerEdge VRTX User's Guide* available at the support site.

VRTX Update Procedure

Prerequisites

- iDRAC web interface for each server node must be accessible from management station.
- Local or remote access to OS management for each server node.
- VRTX chassis CMC web interface must be accessible from management station.
- All server and chassis components must be in a Healthy state with no outstanding issues or alerts. Any issues must be resolved prior to performing updates.

Server Node Updates

Visit support.dell.com and download the latest available Windows DUP versions of the following programmable components for the server node model (M520, M620, M630 or M820) used in the VRTX chassis to be updated:

- BIOS
- iDRAC7/8
- CPLD

Also, download the latest available Shared PERC8 driver for the operating system installed on the server node.

Note: If the OS is VMWare ESXi, the driver is part of the Dell ESXi image.

Updating the Server Nodes

- 1) Update the operating system-specific Shared PERC8 driver on all the server nodes. For Windows operating system, see the *Shared PERC8 User's Guide* available at support.dell.com. For VMware, the driver is part of the Dell-customized ESXi image. For more information, see installing async drivers at kb.vmware.com.
- 2) Update the iDRAC firmware using Windows DUP and the iDRAC web interface for each server node or on all server nodes at once through VRTX CMC web interface if Enterprise license is in place and the Extended Storage feature is enabled. This update takes several minutes to complete. After the update, iDRAC web interface is inaccessible for approximately 3 minutes.
- 3) Update the CPLD on each server node using the Windows DUP and iDRAC web interface. Make sure to select "Install and Reboot" after uploading the DUP, which forces the server nodes to reboot and perform the CPLD update. After the CPLD update completes a complete server node power cycle occurs. This action results in the iDRAC web interface being inaccessible for approximately three minutes.
- 4) Update the BIOS on each server node using Windows DUP and the iDRAC web interface, or on all server nodes at once through the VRTX CMC web interface (**Server Overview -> Update** tab) if Enterprise license is in place. Make sure to select "Install and Reboot" after uploading the DUP, which forces the server nodes to reboot and execute the BIOS update.

VRTX Chassis Component Updates

Visit support.dell.com and download the latest available versions of the following programmable components for the VRTX chassis to be updated:

- CMC Firmware
- HDD Firmware (Windows DUP)
- Shared PERC8 Firmware (Windows DUP)
- VRTX Chassis Infrastructure Firmware
- VRTX Storage Backplane Expander Firmware (Windows DUP)

Updating VRTX Chassis Components

- 1) Before updating any chassis components, the chassis must be powered on, all server nodes must be powered down, and remain powered down until all chassis component updates are complete.
- 2) Update the HDD firmware for each of the installed shared storage HDD, using the **Storage -> Update** tab in the CMC web interface.
- 3) Update the CMC firmware using the **Chassis Overview -> Update** tab in the CMC web interface. Make sure to update both CMC controllers in the same operation by selecting both the Active and Standby controller checkboxes. After the firmware upload completes, the CMC is rebooted to perform the update resulting in the CMC web interface being inaccessible for several minutes.

- 4) Update the VRTX chassis infrastructure firmware using the **Chassis Overview -> Update** tab in the CMC web interface. This update results in the chassis power cycling automatically and may result in a CMC controller reset as well. As a result, the CMC web interface becomes inaccessible for several minutes.
- 5) Update the VRTX storage backplane expander firmware using the **Storage -> Update** tab in the CMC web interface.
- 6) Verify that all installed Shared PERC8 controllers are enabled by checking the **Storage -> Controllers** tab in the CMC web interface. If the second Shared PERC8 controller is displayed as "Disabled PERC (Integrated 2)", use the CMC command:
'racadm raid enableperc:RAID.ChassisIntegrated.2-1' to enable the previously disabled controller prior to performing Step 7 below. The VRTX chassis power cycles after the Shared PERC8 enablement command is run.
- 7) Update the Shared PERC8 controller firmware on all installed controllers using the **Storage -> Update** tab in the CMC web interface. Make sure to update both controllers in the **High Availability Dual Shared PERC8** configuration in the same operation.
- 8) If a Shared PERC8 controller was required to be enabled for update in Step 6 above, you can disable the controller again if required. Use the CMC command **'racadm raid disableperc:Raid.ChassisIntegrated.2-1'**. This command results in a chassis power cycle.

Contacting Dell

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

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

1. Visit **www.dell.com/support**.
2. Select your support category.
3. Verify your country or region in the **Choose a Country/Region** drop-down menu at the top of page.
4. Select the appropriate service or support link based on your need.

For information about documentation support:

1. Go to **dell.com/support/manuals**
2. In the **Tell us about your Dell system** section, under **No**, select **Choose from a list of all Dell products** and click **Continue**.
3. In the **Select your product type** section, click **Software & Security**.
4. In the **Choose your Dell Software** section, click the required link from the following:
 - Client System Management
 - Enterprise System Management
 - Remote Enterprise System Management
 - Serviceability Tools
5. To view the document, click the required product version.

Note: You can also directly access the documents using the following links:

- o For Client System Management documents — **dell.com/OMConnectionsClient**
- o For Enterprise System Management documents — **dell.com/openmanagemanuals**
- o For Remote Enterprise System Management documents — **dell.com/esmmanuals**
- o For Serviceability Tools documents — **dell.com/serviceabilitytools**

Accessing Documents From Dell Support Site

To access the documents from Dell Support site:

1. Go to **dell.com/support/manuals**.
2. In the **Tell us about your Dell system** section, under **No**, select **Choose from a list of all Dell products** and click **Continue**.
3. In the **Select your product type** section, click **Software, Monitors, Electronics & Peripherals**.
4. In the **Choose your Dell Software, Monitors, Electronics & Peripherals** section, click **Software**.
5. In the **Choose your Dell Software section**, click the required link from the following:
 - Client System Management
 - Enterprise System Management
 - Remote Enterprise System Management
 - Serviceability Tools
6. To view the document, click the required product version.

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- For Client System Management documents — **dell.com/OMConnectionsClient**
- For Enterprise System Management documents — **dell.com/openmanagemanuals**
- For Remote Enterprise System Management documents — **dell.com/esmmanuals**

For Serviceability Tools documents — **dell.com/serviceabilitytools**

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