

**Integrated Dell Remote
Access Controller 8
(iDRAC8) and iDRAC7
with Lifecycle
Controller for Dell
PowerEdge Servers
Version 2.30.30.30**

Release Notes



Release Notes

Integrated Dell Remote Access Controller (iDRAC)

iDRAC is a systems management hardware and software solution that provides remote management capabilities, crashed system recovery, and power control functions for Dell PowerEdge systems.

Lifecycle Controller (LC-GUI)

An out-of-band mechanism for configuring the platform, applying firmware updates, saving or restoring a system backup, or deploying an operating system, either by using a GUI or a remote scripting language. Lifecycle Controller GUI provides advanced embedded systems management and is delivered as part of Integrated Dell Remote Access Controller 8 (iDRAC8). The GUI enables remote systems management in a one-to-one method and is accessible by pressing F10 during system boot.

Lifecycle Controller Remote Services (LC-RS)

LC-RS provides advanced embedded systems management and is delivered as part of iDRAC8 and iDRAC7. LC-RS enables remote systems management in a one-to-many method. Remote Services uses WS-Management (WS-MAN) protocol based Web services interface to remotely provision and manage the servers.

Version

iDRAC 2.30.30.30 (applies to both iDRAC7 and iDRAC8)
Lifecycle Controller 2.30.30.30

Release Date

March 2016

Previous Version

2.21.21.21 (iDRAC8 and iDRAC7 with Lifecycle Controller)
2.22.22.22 (iDRAC8 with Lifecycle Controller)
2.23.23.23 (iDRAC 8 with Lifecycle Controller)

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 and compatible with other system modules (firmware, BIOS, drivers, and software).

Platform(s) Affected

iDRAC8 and LC is supported on the following systems:

- PowerEdge T130
- PowerEdge R230
- PowerEdge R330
- PowerEdge T330
- PowerEdge FD332
- PowerEdge R430
- PowerEdge T430
- PowerEdge FC430
- PowerEdge R530
- PowerEdge R530XD

- PowerEdge R630
- PowerEdge M630
- PowerEdge FC630
- PowerEdge T630
- PowerEdge R730
- PowerEdge R730XD
- PowerEdge M830
- PowerEdge FC830
- PowerEdge R930
- PowerEdge C4130
- PowerEdge C6320
- Precision Rack 7910
- DSS1500
- DSS1510
- DSS2500
- DCS6400
- DCSFS3500

iDRAC7 and LC is supported only on the following systems:

- PowerEdge R220
- PowerEdge R320
- PowerEdge R420
- PowerEdge R520
- PowerEdge R620
- PowerEdge R720
- PowerEdge R720xd
- PowerEdge R820
- PowerEdge R920
- PowerEdge M420
- PowerEdge M520
- PowerEdge M620
- PowerEdge M820
- PowerEdge FM120
- PowerEdge T320
- PowerEdge T420
- PowerEdge T620
- Powervault NX3300
- Powervault NX3200
- Powervault NX400

What is Supported?

License Requirements

- Software licensing has replaced hardware licensing. For more information, see the *Integrated Dell Remote Access Controller 8 (iDRAC8) and iDRAC 7 v2.30.30.30 User's Guide*, available at dell.com/idracmanuals.
- Many features in Lifecycle Controller are licensed. You must install the appropriate license to use these features. For more information, see the Introduction section in the *Dell Lifecycle Controller GUI v2.30.30.30 User's Guide*, available at dell.com/idracmanuals.

Supported Managed Server Operating Systems for iDRAC7 and iDRAC8

The following operating systems are supported by iDRAC7 and iDRAC8:

- Windows Server 2008 R2 SP1 Foundation Edition
- Windows Server 2008 R2 SP1 Enterprise Edition
- Windows Server 2008 R2 SP1 Standard Edition
- Windows Server 2008 R2 SP1 Datacenter Edition
- Windows Server 2008 R2 SP1 Embedded Systems
- Windows Server 2008 SP2 x32 (iDRAC7 only)
- Windows Server 2008 SP2 x64 (iDRAC7 only)
- Windows Server 2012 Foundation Edition
- Windows Server 2012 Essentials Edition
- Windows Server 2012 Standard Edition
- Windows Server 2012 Datacenter Edition
- Windows Server 2012 R2 Foundation Edition
- Windows Server 2012 R2 Essentials Edition
- Windows Server 2012 R2 Standard Edition
- Windows Server 2012 R2 Datacenter Edition
- Windows Server 2012 for Embedded Systems (Base and R2 SP1)
- WinPE 3.0 32 bit
- WinPE 4.0 32 bit
- WinPE 4.0 64 bit
- WinPE 5.0 64 bit
- Red Hat Enterprise Linux 7.1
- Red Hat Enterprise Linux 6.7
- SUSE Linux Enterprise Server 12
- SUSE Linux Enterprise Server 11 SP4
- VMware vSphere 5.1 U3
- VMware vSphere 5.5 U3
- VMware vSphere 6.1
- Citrix XenServer 6.2
- Citrix XenServer 6.5

Supported Web Browsers for iDRAC7 and iDRAC8

- Microsoft Internet Explorer 9
- Microsoft Internet Explorer 10
- Microsoft Internet Explorer 11
- Safari version 7.1

- Safari version 8.0
- Mozilla Firefox version 42
- Mozilla Firefox version 43
- Google Chrome version 46
- Google Chrome version 47

Note: Microsoft Windows Edge is not a supported web browser.

What's New

- Added support for the Intel E5-26xx v4 family of processors.
- Added support for Redfish 1.0, which is a standard for data center and systems management that delivers improved performance, functionality, scalability, and security. This is designed for simple and interoperable management of modern scalable platform hardware and for quick and effective implementation.
- Added support for HTML5 virtual console and virtual media.
- Added support for enhanced and flexible back plane zoning or split modes. The current zoning on a 24-drive Dell PowerEdge R730xd server is 12+12. This is enhanced to 4+20, 8+16, 16+8, and 20+4 configurations in iDRAC version 2.30.30.30.
- Added Remote iDRAC Hard Reset feature, which allows you to reset the unresponsive iDRAC servers. This feature requires installation of the iDRAC Service Module (iSM).
- Added support for PERC 9.3 version of firmware.
- Added support to manage and monitor 192 to 240 virtual disks supported by the PERC H830 Adapter if auto-configuration is enabled through PERC controller BIOS, Human Interface Infrastructure (HII), and Dell OpenManage Server Administrator (OMSA).
- Added support to update firmware of SATA HDD devices.
- Renamed the Tech Support Report feature to SupportAssist Collection.
- Added support for IPMI 2.0 version 1.1 and IPMI 5/6 Errata.
- Enhanced the hard-disk event logging to SEL that are connected to Dell PowerEdge C4130 server.
- Added support of GPU thermal status report in iDRAC user interface.
- Added HTTP support in Dell Lifecycle Controller UI for file operations.
- Added an option to enable or disable vLAN port.
- Added initial Setup Wizard feature in Dell Lifecycle controller UI for initial setup of the system.
- Added support for HBA H330 Mini Mono and HBA H330 adapter controller.
- Added support for the ConnectX-4 Lx Dual Port 25 GbE DA/SFP rNDC (Network Card).
- Added support for SUSE Linux Enterprise Server 12 SP1 and RHEL 7.2 operating systems from LC UI.
- Added Disk Cache policy option while creating a virtual disk by using PERC S130.
- Added support for the following PCIe SSD cards:
 - Dell Express Flash NVMe PM1725 800GB PCIe SSD Controller
 - Dell Express Flash NVMe PM1725 1.6TB PCIe SSD Controller
 - Dell Express Flash NVMe PM1725 3.2TB PCIe SSD Controller
 - Dell Express Flash NVMe PM1725 1.6TB PCIe SSD Adapter
 - Dell Express Flash NVMe PM1725 3.2TB PCIe SSD Adapter
 - Dell Express Flash NVMe PM1725 6.4TB PCIe SSD Adapter

iDRAC – Fixes

- Critical alerts are not generated if hard drives fail.
- Cannot export Lifecycle Controller log to the NFS share using the Lifecycle Controller web interface.
- On iDRAC version 2.10.10.10 and later, CSR displays an Unable to Print attribute error.

- Certificate Signing Requests (CSR) generated using iDRAC web or command-line interface is signed using SHA-1 signature algorithm.
- Dell Internal Dual SD Module (IDSDM) displays an incorrect firmware version.
- Setting SMTP password using certain special characters is not allowed.
- On 12th generation of PowerEdge server, PSU firmware update fails if the BIOS and PSU are updated together.
- Ability to change iDRAC.ipblocking attributes that are set to default value using the RACADM interface.
- iDRAC GUI violates RFC 1123 by allowing a dot at the end of host name if it is followed by an alphabet.
- On systems with iDRAC version 2.20.20.20 and 2.21.21.21, custom thermal settings such as fan speed offsets, exhaust temperature and custom minimum fan speed are lost after iDRAC reset or when AC power cycle is performed.

iDRAC - Important Notes

- Lifecycle Controller features such as Auto Discovery and vFlash are now licensed. Install the correct licenses for Lifecycle Controller Remote Services to work properly.
- Only if there is one or more network interface cards (NDC or LOM) present on the managed system, **Network Devices** appears under **Overview** -> **Hardware** section in the iDRAC web interface.
- For the virtual console and virtual media to function properly, iDRAC8 web URL must be added to the Local Intranet site list and the security level for the Local Intranet zone must be set to Medium-Low. In addition, if Virtual Console and Virtual Media are configured to use Java plug-in, disable the **Enhanced Security Mode** in Internet Explorer. If this is not possible, then in iDRAC8, configure Virtual Console to use the ActiveX plug-in.
- If the instant messenger is launched in the Virtual Console viewer with ActiveX native plug-in and another application is started (example Notepad, WordPad, and so on) without minimizing the Virtual Console, the instant messenger box also pops-up on other applications. This does not happen with Java plug-in.
- When a system is in POST, it is not possible to attach a vFlash partition as the first boot device.
- Virtual Console Viewer from iDRAC8 Web interface terminates when the managed system is restarted.
- A pop-up message is not displayed to confirm if test emails are successfully sent or not.
- For iDRAC8 Enterprise, when the Virtual Console is disabled and Virtual Media is disabled and/or detached, the console port (default: 5900) remains open. For iDRAC8 Express (no Virtual Console or Virtual Media) the console port is open.
- If auto-negotiation is enabled while setting iDRAC8 network, 1 Gbps is not supported and you cannot manually select it.
- A USB device mounted through Virtual Media in floppy emulation mode for a Linux operating system shows as a removable volume.
- During system power operations, if the video mode changes, the message "Out of range" may appear for a short while on the Virtual Console.
- When using the Virtual Console in native console mode with **Pass all keystrokes to server** disabled in Internet Explorer versions 8 and 9, if an F1/F2 prompt is encountered, pressing F1 displays the Virtual Console online help pop-up in addition to continuing with the system boot.
- When any of the storage enclosure components are removed, the corresponding details are not displayed. Only the name and status attributes are displayed.
- When certain RAID operations are requested using WS-MAN on non-RAID cards such as, the Dell SAS 6Gbs HBA or the Internal Tape Adapter, the operation succeeds, however the job fails with the error message "Unable to locate device in current configuration".
- If the iDRAC8 network is configured to use a shared LOM and the spanning tree is enabled on the LOM port, WS-MAN and remote service commands may time-out in the following scenarios:
 - At system reboot
 - When CSIOR is running
 - While entering SSM

The connectivity lost is variable. In typical cases, it is approximately:

- 40 seconds at system reboot and varies per NIC or link speed
- 20 seconds when CSIOR is running
- 40-60 seconds while entering SSM

- The reason is that when spanning tree is enabled, the switch does not allow the link to re-establish the connection after a reset until it completes checking for network loops. Server reboots reset the NIC and disconnects the link.
Note: This does not occur while using dedicated NIC because server reboots do not affect the dedicated NIC.
- When logging in to iDRAC8 web interface using Internet Explorer 9 and IPv6 address, the connection may not succeed. To resolve this, make sure that in **Internet Explorer -> Tools -> Internet Options -> Connections -> LAN Settings**, the **Use automatic configuration script** option is cleared.
- On PowerEdge systems with cabled power supply units installed (that is, PSUs which do not provide PMBus support), power values may still be displayed in the iDRAC8 web and LCD interfaces. Due to lack of PMBus support in the PSUs, the power values displayed on the GUI pages, including the **Overview -> Hardware -> Front Panel** page, may not be correct.
- Due to the independent nature of the alert processes (e-mail, SMTP, remote syslog), when changing the licenses that affect alert features (example, email alerts for Express or remote syslog for Enterprise) there is no guarantee of the timing of the features being activated or deactivated when the license changes.
- In the iDRAC web interface, when the **System Inventory** page is accessed for the first time, it takes up to two minutes for the inventory data to be collected. After the data collection is complete, refresh the page to display the inventory data.
- Make sure to synchronize the iDRAC time with the management station's time to avoid certificate related issues. If the time is not synchronized, issues such as server certificate expiration may be seen. If this occurs, re-synchronize iDRAC time with the management station's time and reboot iDRAC.
- On a system running Linux, after launching the Virtual Console, if you click a menu item and it remains open, the Ctrl + Alt + L keystroke sent from iDRAC to the host system does not lock the host system. The behavior is same as using a local keyboard.
- The default time zone value is US Central Time. To make sure Single Sign-On (SSO) and Directory Service TFA (smart card) continue to work properly, the iDRAC time zone must match the time zone where iDRAC is located, assuming Active Directory server's time zone is already configured to match the Active Directory's location.
For example, if Active Directory server is located at US Eastern time zone and iDRAC is located at US Pacific time zone, Active Directory server has to be configured as US Eastern time zone (this is Active Directory server configuration and is normally configured), and iDRAC must be configured as US Pacific time zone. For more information to configure the time zone, see the *Integrated Dell Remote Access Controller 8 (iDRAC8) and iDRAC7 v2.30.30.30 User's Guide*.
- If the management station is using MAC operating system, it takes more time to launch the Virtual Console due to the following DNS search issue: <http://www.eigenspace.org/2011/07/fixing-osx-lion-dns-search-domains>.
- The help page for the Export and Import of Server Profile feature does not provide the correct share name. See the *Web Services Interface Guide* available at Dell TechCenter for the correct share name.
- Remote Sys Log settings take effect only if you do the following:
 - Enable remote syslog feature
 - Specify the server address and port number
 - Enable **Remote SysLog** option on the **Alerts** page
- When creating a Virtual Media image from a folder, the output image file size is at least 512 MB.
- To launch Virtual Console using Java plug-in, only JavaWebStart versions 1.5, 1.6, and 1.7 from Sun (Oracle) is supported. Any other versions or any other installations are not supported.
- On a server running RHEL operating system, performing the following steps can create an eth*.bak interface (where * is the interface number). This is visible in the Network Manger interface. This interface can be safely ignored.
 1. After the operating system (RHEL) is running, enable OS to iDRAC Pass-through channel through the iDRAC web interface.
 2. Disable OS to iDRAC Pass-through.
 3. Reboot or power cycle the server, and then re-enable OS to iDRAC Pass-through.
- Any change in VNC server settings disconnects the active VNC session.

- USB NIC is supported on RHEL 6.5 32-bit and RHEL 6.5 64-bit operating systems. On any Linux operating system, for <https://idrac.local> to work, the avahi, nss-mdns, and dependent packages must be installed.
- CIFS supports both IPv4 and IPv6 addresses but NFS supports only IPv4 address.
- During POST, if the system displays cable detect message: "CBL0001: Backplane 0 power cable disconnected", you must check all the backplane cables as this message is not limited to Backplane 0 only.
- Do not reboot the host while RAID rebuild is in-progress. If the host is reset, iDRAC is also reset.
- On certain iDRAC versions, creating vFlash partition and downloading DUP images may take a little longer than usual due to updated open source packages.
- After updating the firmware, ensure that you clear the browser cache before accessing the iDRAC web interface.

iDRAC - Known Issues

Issue 1:

Description

In Chinese locale on Windows operating system, while launching the Virtual Console using Java plug-in, occasionally you may see a Java compilation error.

Resolution

1. Open the Java control panel.
2. Go to **General** -> **Network Settings**.
3. Select **Direct Connection** and click **OK**.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 2:

Description

If the management station is using Linux operating system with the **Pass all keystrokes to server** option enabled, you cannot resize the Virtual Console viewer window by dragging the corners or frame. This is a limitation of X-Windows.

Resolution

Do any of the following:

- Disable the Pass all keystrokes to server option.
- With **Pass all keystrokes to server** option enabled, open any menu in the Virtual Console viewer window title bar, and then re-size the window.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 3:

Description

Relevant error message is not displayed when you apply the Minimum Fan Speed in PWM (% of Max) with custom or blank value.

Resolution

Enter the value in the range displayed next to the **Custom** field.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 4:

Description

Relevant error message is not displayed when OS to iDRAC pass-through is disabled or changed to LOM state even if iDRAC Service Module is installed in the host OS.

Resolution

None.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 5:

Description

Cannot set VNC password with quotes.

Resolution

Do not use double quotes for the VNC password.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 6:

Description

In some scenarios, typically for state change events occurring within a span of few seconds, the sequence of events reported in the Lifecycle Log (or corresponding SNMP traps) for storage devices may not exactly match the sequence in which they occurred.

Resolution

Check the current state or attribute of the storage device using any of the iDRAC8 interfaces (example, iDRAC8 web interface, RACADM, and so on).

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8 and out-of-band enabled PERC storage controllers.

Issue 7:

Description

When enclosures connected in the redundant path are re-wired (connections are switched) to result in a non-redundant path, the reported connected port value of the enclosures may not be accurate.

Resolution

Power cycle the server.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8 and out-of-band enabled PERC storage controllers.

Issue 8:

Description

When a storage enclosure is disconnected or accidentally removed, the corresponding status of its components (that is, EMM, PSU, fan, and temperature sensors) is reported as critical.

Resolution

If the storage enclosure is disconnected accidentally, reconnect it to get back to normal state. If it is intentional, perform iDRAC8 reboot or server power cycle to remove the enclosure entries from the consoles.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8 and out-of-band enabled PERC storage controllers.

Issue 9:

Description

After performing storage operations on PERC through Option-ROM (CTRL-R) or before a system reset (warm boot), the corresponding events are not recorded in Lifecycle log. SNMP traps are generated and the corresponding inventory changes are not reflected in the iDRAC8 web interface or RACADM.

Resolution

To update the storage inventory, perform a server power cycle (cold boot).

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8 and out-of-band enabled PERC storage controllers.

Issue 10:

Description

For storage configuration operations (example, virtual disk creation, assign hot spare, foreign configuration operations, and so on) that are executed real-time (that is, not requiring a server reboot), the corresponding job status may be displayed as failed even though the operation was successful.

Resolution

View the Lifecycle Controller Logs to check whether there are any relevant messages indicating the success of the individual configuration operations. Alternatively, view the refreshed inventory of the storage subsystem using any of the iDRAC8 interfaces and verify if the applied configuration has taken effect. Do not combine multiple configuration operations within the same real-time job instead perform each configuration as a separate job.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8 and out-of-band enabled PERC storage controllers.

Issue 11:

Description

In some scenarios, typically when a PCIe SSD is removed from a server slot and a different PCIe SSD is inserted quickly (that is, within 5-10 seconds) into the same slot, the server fan speeds may not get optimally configured to accommodate the thermal profile or tier of the inserted PCIe SSD.

Resolution

Power cycle the server.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8 and PCIe SSDs.

Issue 12:

Description:

When using CIFS mount using host IPv6 address to perform firmware update, the update job may be unsuccessful. A typical CIFS IPv6 address of the form 2620:14c:804:23a0:a410:8014:8dab:5e4c as part of update xml mail because the mount command does not connect to the share drive.

Resolution

On system with the CIFS share:

1. Start the Registry Editor (**regedt32.exe**).
2. Locate the following key in the Windows registry:
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\LanmanServer\Parameters
3. Add the following entries to the registry key
 - DWORD key DisableStrictNameChecking
 - Add with value 1 (decimal) to enable file sharing.
4. Reboot your computer for the changes to take effect.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 13:**Description**

iDRAC8 user interfaces (example, iDRAC8 web interface, RACADM and so on) does not display the newer storage enclosure or backplane firmware version when the firmware is updated through the operating system using DUP.

Resolution

To update the storage inventory, perform a server power cycle (cold boot) or reset the iDRAC.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8 and out-of-band enabled PERC storage controllers.

Issue 14:**Description**

Power Cap (in Watts, BTU/hr, %) is not accepting values preceding with zero (0).

Resolution

Do not precede a zero (0) while entering value for **Power Cap** in the **Power Configuration** page.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 15:**Description**

In the **Network Interfaces** page > **Host OS Network Interfaces** section, the link to the **Network Devices** page is not available for embedded LOM.

Resolution

In the **Network Devices** page, see the FQDD detail that does not have the link.

Version/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 16:**Description**

The **Print** option in iDRAC web page does not work if you are using Internet Explorer for iDRAC web interface.

Resolution

Use the **Print** option from the browser or use other supported browsers such as Firefox, Chrome, or MAC Safari.

Version/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 17:**Description**

Relevant status is not shown when a corrupt SD card is inserted. Currently, the status is displayed as Absent.

Resolution

Make sure a valid SD card is inserted.

Version/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 18:

Description

When you log in to the iDRAC web interface using Internet Explorer 8.x and prior versions, content in few pages is not displayed properly and a few UI controls may not work.

This is a known issue with Internet Explorer.

Resolution

Internet Explorer 8.x and prior versions, are not supported browsers with iDRAC8. Ensure that you use Internet Explorer 9 and later versions.

Version/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 19:

Description

The firmware images for all components are deleted from the firmware partition on Lifecycle Controller, when the partition reaches 90% of space limit. After the firmware images are deleted, the rollback option

for all the components is listed as NULL, across all interfaces such as WS-MAN, RACADM, GUI and the following log message is logged in the Lifecycle log:

```
"RED032: Reached maximum size limit allowed for storing firmware images. Deleted all rollback firmware images."
```

Resolution

None

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 20:

Description

If the PERC controllers have global hot spare assigned and a virtual disk is deleted, the physical disk configured as global hot spare is not reported as hot spare through the iDRAC interface. However, the physical disk continues to function as a global hot spare.

Resolution

Reset DRAC or power cycle the host system.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8 and out-of-band enabled PERC storage controllers.

Issue 21:

Description

In the Safari browser, if the iDRAC web session times out; clicking the Virtual Console and logging out of the GUI page does not work.

Resolution

Instead of Virtual Console menu, choose other options like logout or other menu options, or use GUI refresh or Browser refresh option to logout.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 22:

Description

After updating the firmware on an enclosure connected to a 12Gbps SAS Controller, the updated firmware version is not displayed in the inventory or through any of the interfaces (iDRAC GUI, RACADM) until the server is powered off and then powered back on.

Resolution

Power the server off then power it on. The updated firmware version is displayed.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 23:

Description

Updating multiple iDRAC DUP using the web interface is not successful when the total size of the DUPs exceeds 300 MB.

Resolution

Make sure the total size is less than 300 MB and then perform an update.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 24:

Description

Repository update operations through iDRAC with reserved characters in user name and password may not be successful at the DUP download stage, even when they are properly percent encoded by the user. This does not affect other update methods.

Resolution

Use a user name and password without reserved characters and then perform an update.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 25:

Description

On the Dell 13th generation PowerEdge servers, after replacing the motherboard, if you use the Easy Restore feature to restore the UEFI Diagnostic utility, the UEFI Diagnostic is restored successfully. However, the iDRAC web interface may not show the restored Diagnostic version in the System Inventory page.

Resolution

Reset iDRAC.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 26:

Description

On the Dell 13th generation PowerEdge servers, a clone export of a system with 64 virtual disks does not recreate the virtual disks on the target system.

Resolution

On Clone or Replace modes of Configuration XML export, the virtual disk creation operation is set to **CreateAuto** by default. Change the operation to **Create** and specify the physical disks to be used by FQDD to resolve this issue.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 27:

Description

(Virtual) Keyboard stopped working on iDRAC Virtual Console, but the mouse movements continues to work.

Resolution

Exit and restart Virtual Console. If the Virtual Media was in use, ensure that it is activated (Connect and Map media).

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 28:

Description

Infrequently, iDRAC logs the following message to the Lifecycle Controller log:

```
PWR2262 "The Intel Management Engine has reported an internal system error."
```

Also, logs the following within the next few minutes:

```
PWR2264 "The Intel Management Engine has reported normal system operation."
```

Resolution

No action required.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 29:

Description

In the iDRAC web interface, the following storage pending operations status is not displayed in Pending Operations pop-up message and **Storage->Pending Operations** page:

- Virtual Disk(s) - Encrypt operations.
- Controller(s) - Create, Modify, or Delete security key operations.

- Controller(s) - Import or Clear Foreign Configuration operations.
- PCIe SSD(s) - Secure Erase or Prepare to Remove operations.

Resolution

None.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 30:

Description

When a passive backplane (that is not connected to PERC) is updated from the operating system, the **System Inventory** page in the iDRAC web interface does not display the updated version.

Resolution

Reset iDRAC using racadm racreset command.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 31:

Description

If you log in to the iDRAC8 web interface with Login and Config iDRAC privilege, then on the **Update and Rollback** page, an additional **Firmware Settings** submenu appears.

Resolution

None

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 32:**Description**

On the **Network Devices** page, the Initiator and Storage Target Settings table overflows to the right if you set the initiator name and chap ID value with more than 120 characters.

Resolution

Reduce the zoom level or use the scrollbar to view the entire data.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 33:**Description**

URL string in iDRAC hardware inventory list displays incorrect https port number.

Resolution

IP URL in hardware inventory output always displays the standard https port number, that is, 443.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 34:**Description**

Sometimes Virtual Console does not get enabled after iDRAC is reset.

Resolution

Toggle the Virtual Console option in the iDRAC web interface.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 35:**Description**

When you update the rebrand image from the iDRAC web interface, the system reboots and the rebranded images are applied successfully. During POST, if you press <F10>, the Lifecycle Controller UI starts to launch. The progress bar displays till 90% and then the system starts rebooting.

Resolution

After rebranding, do not access the Lifecycle Controller UI.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 36:**Description**

If the number of physical or virtual disks selected for identification is more than 100, the blink or unblink operation fails without displaying any message.

Resolution

Select less than 100 physical or virtual disks, or the required disk and retry the operation.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 37:**Description**

Chassis slots mapped to the server are not visible using the WS-MAN DCIM_Slot class enumeration. DCIM_slot class provides the server hardware information in terms of available and occupied slots where devices can be added or removed respectively.

Resolution

None

Versions/ Systems Affected

All Dell Modular PowerEdge systems with iDRAC8.

Issue 38:**Description**

While importing or replacing license files using Google Chrome or Microsoft Internet Explorer, the operation fails for certain license files.

Resolution

Import or replace the license files using other supported browser(s) or using other interfaces such as RACADM, Lifecycle Controller, and so on.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 39:**Description**

When the physical drives connected to a PERC storage controller are in Non-RAID (or uninitialized) state, the size reported by the iDRAC interfaces (WS-MAN, RACADM, and iDRAC GUI) is slightly less than the actual size of the drive.

Resolution

This is only a reporting issue. Full capacity of the drives can be used to deploy the operating systems. Other Dell applications and utilities will continue to report the right size.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 40:**Description**

On updating Dell PowerEdge FD332 PERC controllers to 25.2.2-0002, the controller is switched to HBA mode.

Resolution

Manually switch the controller to RAID mode by rebooting the host and with the Ctrl+R option using the Option ROM interface.

Versions/Systems Affected

All Dell PowerEdge system with iDRAC8 and with PERC Controller version 25.2.2-0002.

Issue 41:**Description**

The **Virtual Address** feature under **Persistence Policy** may not work when set to default, if the VirtualAddressManagement attribute is set to FlexAddress mode on iDRAC and if the FlexAddress feature is disabled in CMC.

Resolution

Set the VirtualAddressManagement attribute to Console mode in iDRAC or enable the FlexAddress feature in CMC.

Versions/ Systems Affected

All Modular Dell PowerEdge systems with iDRAC8.

Issue 42:**Description**

While importing the server profile, if the host system experiences an unexpected power loss or if iDRAC resets, the Import Server Profile operation performs a cleanup and fails.

Resolution

Before you try importing the profile again or performing any other Lifecycle Controller operation, ensure that you run Collect System Inventory On Reboot (CSIOR). If CSIOR is not enabled, boot in to Lifecycle Controller and exit.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 43:**Description**

When setting the plain text password of an account using racadm after it is set with a SHA256 password (using either XML config or RACADM), the account is disabled.

Resolution

After setting the password with racadm, ensure that you enable the user using either racadm or iDRAC GUI. You can also set the plain text password in the GUI by selecting the **Change Password** check box and ensuring that the **Enable User** check box is selected.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 44:**Description**

After importing a server profile, the **Input Power Redundant** option does not appear under **Redundancy Policy** on the **Power Configuration** page.

Resolution

Reboot iDRAC or perform an AC power cycle to clear the issue.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 45:**Description**

Using shortcut key combination on a virtual console using ActiveX displays an error when 2 different iDRAC interfaces are accessed from the same management station.

Resolution

You can use the mouse to operate the application or use the application menu on the managed station instead of using the shortcut key combinations.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 46:**Description**

Occasionally, uploading the iDRAC files such as license, certificate, firmware, and so on using the iDRAC GUI fails.

Resolution

Try any of the following:

- Use a local/remote racadm or WS-MAN method to upload the file.
- Use a different browser and upload the file.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 47:**Description**

The Enumeration filter commands fail for certain filters.

Resolution

Use Enumeration or Get Instance call to view the same data. The required properties can be filtered by the consoles.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 48:**Description**

While enumerating using WS-MAN, if you include more than 7 properties in the WQL/CQL query, the select query does not return any result.

Resolution

The maximum number of properties that can be included in a WQL/CQL query using WS-MAN is 7. Perform the filtering on the client system or make multiple calls each having not more than 7 properties.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 49:**Description**

Scheduling an automatic update using the iDRAC GUI fails in case CSIOR is set to disabled.

Resolution

Use RACADM to schedule an automatic update job with CSIOR disabled or enable CSIOR and update using the iDRAC GUI.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 50:**Description**

The BIOS configuration job completes with errors when Virtualization Technology is set to **Enabled** or **Disabled**. All the settings are successfully applied, however, the job status displays an error.

Resolution

None.

Versions/ Systems Affected

All PowerEdge systems with iDRAC8.

Issue 51:

Description

On the Dell 12th generation PowerEdge servers flashed with iDRAC8, firmware update and configuration operations including secure erase for Samsung NVMe PCIe SSDs using iDRAC interfaces, do not work. Even though you can start these tasks using iDRAC interfaces, the tasks will eventually fail.

Resolution

Use other methods of firmware update and configuration using the operating system.

Versions/ Systems Affected

Dell 12th generation PowerEdge systems with iDRAC8.

Issue 52:

Description

Creating T10 PI capable virtual disks using T10 PI capable disk-drives from iDRAC GUI fails.

Resolution

Use RACADM, WS-MAN, or OMSS to create virtual disks with T10 PI capability.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 53:

Description

On the Dell 12th generation PowerEdge systems, when downgrading from 2.10.10 to 1.66.65, existing users may occasionally be lost.

Resolution

Re-enter the users after the downgrade. It is recommended that you check the custom settings while upgrading or downgrading the firmware.

Versions/ Systems Affected

All Dell 12th generation PowerEdge systems downgraded from 2.10.10.10 to 1.66.65.

Issue 54:

Description

The `watchdog timer expired` error is logged in the SEL on deleting an iDRAC license file.

Resolution

None.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC Service Module (iSM) enabled from 1.65.65 to 2.10.10.10.

Issue 55:

Description

When Single Sign-on is enabled, the Apply action intermittently fails on systems running Internet Explorer 10 or later versions.

Resolution

Retry the apply operation by clicking **Apply** twice.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 56:

Description

After upgrading iDRAC from version 1.57.57 to 2.20.20.20, the job status in the job queue page in the iDRAC GUI is marked as Completed (0%).

Resolution

The 0% does not indicate anything and the job is complete.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC 1.57.57.

Issue 57:

Description

EOL/Obsolete Software SNMP version detected. [Qualysguard]

Resolution

By default, iDRAC enables SNMP v1, v2, and v3 protocol to validate SNMP queries and gets received from remote systems requesting SNMP data access. Disable SNMP service if not using. To secure credentials, enable SNMP v3 only using RACADM or iDRAC Web interface.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 58:

Description

SNMP Agent Default Community Name (public). [Nessus]

Resolution

iDRAC provides limited read-only information to third-party tools for identification purposes only. The SNMP Agent is enabled by default and uses the default SNMP community name. The SNMP Agent can be disabled or SNMP community name can be changed if not using 3rd party tools.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 59:

Description

SSL Certificate - Self-Signed Certificate. [Qualysguard, Nesssus, Rapid7, Retina].

Resolution

iDRAC default SSL Certificate is self-signed by iDRAC. Upload a 3rd party or in-house CA signed SSL certificate.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 60:

Description

While setting the value for `uefidevicepath` by using RACADM interface, the value displayed in the iDRAC GUI and virtual console is `BIOS Setup` instead of `FirstBootDevice`. However, the correct value is displayed on interfaces such as Redfish, RACADM, and WS-MAN.

Resolution

None

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 61:

Description

On systems where uefidevicepath is not supported by the BIOS, if you set the firstbootdevice value to uefidevicepath, you may notice that the BIOS reboots normally during a host reboot and the firstbootvalue is set to Normal after a reboot.

Resolution

None

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 110977:

Description

When IO Identity Optimization is enabled and you configure the Virtual Addresses, Storage Initiator, and Target settings, the job runs correctly. However, ConfigResults do not list the change set.

Resolution

Refer the Lifecycle Controller logs.

Version/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 236311:

Description

Persistence policy is not supported on ChassisSlot NIC devices.

Resolution

Reconfigure or clear the Virtual, Storage Initiator, or Target settings manually.

Version/Systems Affected

All PowerEdge blade servers on PowerEdge FX2 with iDRAC8.

Issue 206438:

Description

The possible values for the WS-MAN IOI Persistence attributes are confusing to understand.

Example:

PossibleValues = None, WarmReset, ColdReset, WarmReset, ColdReset, ACPowerLoss, WarmReset, ACPowerLoss, ColdReset, ACPowerLoss, WarmReset, ColdReset, ACPowerLoss

Resolution

Add the -format:pretty option in the WinRM command to display the output in an understandable format

Example:

```
<n1:PossibleValues>None</n1:PossibleValues>
<n1:PossibleValues>WarmReset</n1:PossibleValues>
<n1:PossibleValues>ColdReset</n1:PossibleValues>
<n1:PossibleValues>WarmReset, ColdReset</n1:PossibleValues>
```

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 238583:**Description**

On systems with iDRAC8, non-root user privileges are lost after installing and uninstalling a personality module.

Resolution

Login using root credentials and modify the non-root users or reset iDRAC configurations to the default setting.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 203881:**Description**

iDRAC interfaces report the battery status as **Degraded** instead of **Battery Missing** when the battery is unplugged and **Battery High Temp** when the battery temperature exceeds 70°C.

Resolution

None.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7 and iDRAC8 (PERC8 and PERC9).

Issue 171960:**Description**

Lifecycle Controller firmware is inaccessible after a performing hardware diagnostic and rebooting the system. This issue is captured in the Lifecycle Controller log.

Resolution

Reboot the system again to start Lifecycle Controller.

Versions/Systems Affected

Dell 13th generation of PowerEdge systems with iDRAC8.

Issue 227854:**Description**

On certain instances, the communication between iSM and iDRAC fails after enabling or disabling the USB NIC port.

Resolution

Rebooting iDRAC using the racreset command in the RACADM interface.

Versions/Systems Affected:

Dell 13th generation of PowerEdge servers with iDRAC8.

Issue 235870:**Description:**

On systems with Emulex NDC, iDRAC may lose connectivity while switching LOMs.

Resolution

Reboot the host operating system or power cycle the chassis to recover.

Versions/Systems Affected:

Dell 12th generation and 13th generation of PowerEdge server with Emulex NDC.

Issue 245083:**Description**

When Direct-attached storage (DAS) drives are inserted or a copyback operation is started on these drives, Lifecycle Controller logs and other events such as SNMP alerts, syslogs, or email alerts are not generated.

Resolution

You can view the information on the drives inserted on the iDRAC interfaces — web interface, RACADM, and WS-MAN. The copyback operation status is updated in the Lifecycle Controller logs and events are generated after the operation is completed.

Versions/Systems Affected

Dell PowerEdge systems with DAS drives that are directly wired to the controller.

Issue 239254:**Description**

On systems with USB 3.0 enabled in BIOS and running Windows Server 2008 R2, the iDRAC virtual USB NIC device driver does not get loaded automatically.

Resolution

When USB NIC is enabled in iDRAC for the first time, the iDRAC virtual USB NIC device is displayed in the other devices list in the Windows Device Manager. Select the iDRAC Virtual USB NIC device and manually install the Microsoft Remote NDIS compatible Device Network Adapter driver.

Versions/ Systems Affected

All Dell PowerEdge systems with USB 3.0 enabled in BIOS and running Windows Server 2008 R2 operating system on the host server.

Issue 210079:**Description**

While creating virtual disks using iDRAC on Internet Explorer, if you select more than 100 disks an unexpected error occurs. Maximum number of physical disks that can be selected for RAID 10, 50, and 60 is 256.

Resolution

Use other supported browsers such as Google Chrome or Mozilla Firefox instead of Internet Explorer. You can also try using other interfaces such as RACADM WS-MAN, OMSS, or PERC CLI tools to create a VD.

Versions/Systems Affected:

All Dell 13th generation of PowerEdge servers.

Issue 239011:**Description:**

Email alert is not supported for iDRAC Basic license and it is always enabled on the iDRAC web interface. Disable the email alert checkboxes for basic management license.

Resolution:

None.

Versions/Systems Affected:

All Dell 13th generation of PowerEdge servers.

Issue 233766:**Description**

Peak power and current values in iDRAC8 web GUI may appear abnormally high. Additionally, Lifecycle Controller logs may generate a false warning entry: "The system board Consumption current is greater than the upper critical threshold."

Resolution

None

Versions/Systems Affected

All Dell 12th generation of PowerEdge systems with iDRAC8.

Issue 233109**Description**

In rare instances, iDRAC may lose connectivity with an internal memory component without generating any alert or log entry. When this occurs, operations that require a soft reset such as racreset, racresetcfg, firmware update, and factory reset may render iDRAC unresponsive until an AC power cycle is performed.

Resolution

The iDRAC can detect the connectivity problem and log a "SYS198" message to the Lifecycle Controller Log. In addition, the iDRAC will block most operations that would involve or invoke a soft reset. With the exception of the blocked operations, the iDRAC should function normally, but an AC power cycle must be scheduled as soon as possible. When in this degraded state, if a blocked operation is attempted, an appropriate error will occur, but may be different depending on the interface.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 233773:**Description**

After applying the Boot Identity profile on the PowerEdge M630 blade server with DX69G NDC card on port 1, the WWN/MAC page displays the MAC Addresses under the Flexaddress tab only instead of displaying in Remote assigned MAC Address tab.

Resolution

None.

Versions/Systems Affected

Dell PowerEdge M1000e systems

Issue 237790:**Description**

On a 12th generation of PowerEdge server with iDRAC7, the firmware version displays iDRAC8 instead of iDRAC7.

Resolution

None.

Versions/Systems Affected

Dell 12th generation of PowerEdge server with iDRAC7

Issue 258250:

Description

You may notice the following issues on the Dell 12th generation of PowerEdge servers with iDRAC connected to the dedicated network port, if the Evaluation license has expired or after deleting the Enterprise license:

- iDRAC web interface fails to switch the NIC Selection option from **Dedicated** to **Shared** (default)
- the system is inaccessible from remote RACADM and SSH to make changes
- the system is blocked

Resolution

- Before deleting the license, change the **Network Selection** option from **Dedicated** to **Shared**. To access the **Network Selection** option, on the iDRAC web interface, click **iDRAC Settings-> Network-> NIC Selection**.
- In case the license has expired, perform one of the following steps:
 - Reboot the server, press F2 during POST, and set the **Network Selection** option to **Shared**.
 - Install the local RACADM tool in the host server and execute the following commands to switch the network selection to LOM:
To set to LOM1 — `racadm set idrac.nic.selection 2`
To get NIC selection — `racadm get idrac.nic.selection`
For help on the command, type `racadm help idrac.nic.selection`

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 253227:

Description

Occasionally, after changing NIC Selection, you may not be able to set NIC Failover.

Resolution

Reboot iDRAC or perform an AC power cycle to clear the issue.

Versions/ Systems Affected

All Dell PowerEdge systems with iDRAC8 2.21.21.21

Issue 262334:

Description

While configuring the iSCSI parameters on any Emulex adapter using an XML import and with IO Identity Optimization set to enabled, the configuration of the **FirstTgtIscsiName** attribute fails if the length of the configured strings is greater than 152 characters.

Resolution

Disable IO Identity Optimization and run the same job or ensure that the length of the string for the **FirstTgtIscsiName** is less than 152 characters.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8 and Emulex adapters supporting iSCSI.

Issue 268731:

Description

The **Network Devices** page on the iDRAC web interface and the `get NIC.IscsiInitParams` command in the RACADM interface does not list the iSCSI parameters for the QLogic 82xx adapters with iSCSI enabled.

Resolution

Use WS-MAN enumeration to view the iSCSI parameters for the QLogic 82xx adapter with iSCSI enabled.

Versions/Systems Affected

All 12th generation Dell PowerEdge system with iDRAC7 and QLogic 82xx with iSCSI enabled.

Issue 260802:

Description

If the physical drive firmware is updated using the operating system DUP, the updated firmware version is not displayed on the iDRAC interfaces.

Resolution

Perform a host power cycle or run the `racreset RACADM` command.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC8.

Issue 260633:

Description

Deleting multiple virtual disks in a single real-time configuration job fails.

Resolution

Delete one virtual disk at a time.

Versions/Systems Affected

All 13th generation Dell PowerEdge systems with iDRAC8 and PERCH830 adapter.

iDRAC - Limitations

- If floppy emulation is enabled when a bootable USB key is mounted as a Virtual Media from the Virtual Console and if you try to delete any file from the mounted USB key (floppy), the blue screen appears immediately.
- Web server session time-out is not exact. It is either 10% more or 15 seconds more, whichever is greater.
- WinRM and RACADM commands may become unresponsive during BIOS update or when setting BIOS, NIC, or RAID attributes through Lifecycle Controller.
- If invalid credentials are used for the maximum login attempts, the IP is blocked for the duration of the IP Blocking Penalty Time and a message is not displayed.
If Internet Explorer (IE) 64-bit browser is used to log in to iDRAC8 Web interface and when viewing the power usage graph, the X and Y axis labels appear too small to read. This is a known limitation for IE 64-bit only. The labels appear correctly in IE 32-bit browser.
- On Linux management stations, if Firefox is launched from the root user, a USB key is mapped in Virtual Media successfully. If Firefox is launched from any user other than the root user, a USB key is not shown for mapping because the user must have root privileges to access all the low-level drives.
- Alert notification for battery events does not work.
- Operating system information on the System Summary page does not display after rebooting iDRAC8 until the operating system is rebooted.
- iDRAC8 users with user names containing a semi-colon (;) cannot log in to iDRAC8 through SSH.
- In the iDRAC8 web interface, the power consumption sensor reading may have a rounding error of up to 13 Watts depending on the actual power reading. This is an IPMI limitation. The power cap, power graphs, cumulative power, and peak power are not affected by this inaccuracy. However, the power values shown in the power graphs are average values over a period of time and should not be used to calculate instantaneous power.
- Virtual Console uses self-signed certificates. Due to this, when launching Virtual Console from some management stations with Windows operating systems, a certificate warning appears.
- Virtual Console in dual monitor mode is not supported and hence the behavior is undefined, especially using Java plug-in. The primary console is used as the target console.
- The email address specified in iDRAC8 web interface -> **Overview** -> **iDRAC Settings** -> **Network** -> **SSL** -> **Generate Certificate Signing Request (CSR)** page is not validated.
- On a Linux management station with Matrox drivers, from the Virtual Console Viewer if you access the iDRAC Chat window, the mouse appears flickering inside the chat window.

- Work notes can display up to 255 characters. If any of the characters are special characters or non-alpha numeric characters, then the total number of characters displayed is less than 255 to accommodate overriding special characters.
- Performing a graceful shutdown from the iDRAC8 web interface or updating the BIOS or the firmware using the iDRAC8 update method:
 - For SUSE Linux Enterprise Server 11 SP2:
A prompt appears for the Super user password in the operating system console. Provide the root password and proceed with the graceful shutdown or firmware/BIOS update.
 - For Windows OS in screen lock state:
Graceful shutdown does not happen because, Windows operating system has a policy setting to disable shutdown while in locked state. Make sure that this policy is enabled.
If it is not enabled, then it proceeds with ungraceful shutdown. This is equivalent to losing power. After the server resets, multiple options are displayed to start Windows. Select **Start Windows Normally** and then check the System Event Log file. You can see that an event is logged in for the ungraceful shutdown.
- In the iDRAC web interface > **Overview** > **Server** > **Lifecycle Log** page, when the filter criteria results in nothing found, the **Log Results** section does not display any user-friendly information and it is blank instead.
- VNC disconnects after host reboot on Wyse PocketCloud.
- Encrypted VNC does not work through Real VNC client.
- VNC does not work through mobile when encryption is enabled.
- OS to iDRAC communication through the USB NIC interface is not supported on RHEV – H (hypervisor) system.
- USB NIC IP address must always be assigned Link Local address. Assigning IP address other than Link Local IP address or conflicting IP address of other network interface may cause network related issues.
- iDRAC Virtual NIC driver is not loaded when Windows 2008 SP2 (64-bit) installation has completed.
- When Virtual Console is in Lifecycle Controller, if **Next Boot** is set to **BIOS Setup**, rebooting the system boots to Lifecycle Controller instead of BIOS Setup.
- If the http or https service port is set to 1 or 65535, and if you launch the iDRAC8 web interface using the Google Chrome browser, it does not launch iDRAC8. This is because of a limitation in the Google Chrome browser. The resolution is to use Internet Explorer or Mozilla Firefox browsers.
- You cannot start iDRAC after updating the NIC firmware because the update process resets NDC. To resolve this issue, reset iDRAC after updating the NIC firmware.
- When iDRAC NIC is in shared mode and the host system is power cycled, the network connection is lost for a few seconds. During this time, if you perform any action in the active VNC client, the VNC session may close. You must wait for time out (value configured for the VNC Server settings in the Services page in iDRAC Web interface) and then re-establish the VNC connection.
- The ports 6000-6063 are reserved for x-server display. Hence, any service configured with these ports on iDRAC is unsuccessful. Use ports other than 6000 to 6063 to configure the service.
- On the DSS 1500, DSS 1510 and DSS 2500 systems, clicking the Intrusion sensor link in the iDRAC web interface displays an Intrusion sensor not available error because an Intrusion sensor is not available on these systems.
- The timeout value for snmpwalk must be greater than 60 seconds under stress conditions.

LC GUI - Fixes

None.

LC GUI - Important Notes

- This release note is the latest and overrides the release note available on the LC GUI.
- The drivers exposed by Lifecycle Controller are present in a read-only hard disk drive, labeled OEMDRV, which are active for 18 hours. During this period:
 - You cannot update any DUP.
 - Lifecycle Controller cannot invoke CSIOR.

However, if an AC power cycle (cold boot) is performed, the OEMDRV drive is automatically deleted.

- CPLD firmware update has no impact on Trusted Platform Module enablement.
- On the basis of virtual storage device type attached through iDRAC, that is, USB drive or CD/.ISO file, Lifecycle Controller will display Virtual Floppy or Virtual CD respectively.
- If Test Network Connection fails for a valid address, try configuring the network settings again. If the issue persists, restart the system and retry the operation.
- When you reset or update iDRAC, you must reboot Lifecycle Controller if it is launched already. If you fail to reboot, Lifecycle Controller displays an unexpected behavior.
- On PowerEdge FC630, PowerEdge FC830, and PowerEdge FC430 systems, part replacement is not supported if a single PERC (FD332) is replaced with a dual PERC (FD332) or vice versa.
- After performing firmware update or rollback operations using Lifecycle Controller the host is rebooted by default, reboot the host server again to display the updated firmware versions in the Hardware Configuration wizard.
- To record updates in the Lifecycle Log, ensure that Lifecycle Controller and iDRAC are from the same release. If Lifecycle Controller and iDRAC are not from the same release, the Lifecycle Log displays either blank messages or messages with a “~” character.
- When you update the Backplane Expander Firmware on PowerEdge R920 to version 0.33 or 2.03, the comparison page displays only one expander entry. However, the update process happens on both the expanders.
- Fibre channel NIC cards with dual or four ports are displayed as a single port card in Lifecycle Controller. However, all ports are updated when a firmware update is performed.
- The option to enable or disable the disk cache policy for SWRAID controllers are supported only on SWRAID controller driver version 4.1.0-0025 or later.

LC GUI - Known Issues

Issue 1:

Description

If FlexAddress is enabled on Chassis Management Controllers, iDRAC and Lifecycle Controller do not display the same MAC addresses.

Resolution

To view the chassis-assigned MAC address, use the iDRAC web interface or the CMC web interface. Go to **General->Network Settings**.

Versions/Systems Affected

All LC-supported Dell PowerEdge servers.

Issue 2:

Description

While deploying Windows Server 2008 R2 SP1 from OS Deployment of Lifecycle Controller, installation stops with the following error:

There is no disk in the drive. Please insert a disk into drive \Device\Harddisk0\DR0.

This issue may occur due to any of the following reasons:

- Virtual Media is in the attached state and a media is not mapped.
- Virtual Media is in the auto-attached state and a media is not mapped.
- Virtual Media being presented by the AVCT SIP and Virtual Media from iDRAC8 in the detached state.
- Due to failure to load drivers for RAID controllers on the system.

Note: It does not occur with Virtual Media in the detached state. It also does not occur without the SIP and with Virtual Media in the detached from iDRAC8.

Resolution

Retry the operation.

Versions/Systems Affected

All LC-supported Dell PowerEdge servers.

Issue 3:**Description**

Some of the supported components are not displayed on the **Firmware Update-> View Current Versions** page.

Resolution

Restart the server and open **View Current Versions** page.

Versions/Systems Affected

All LC-supported Dell PowerEdge servers.

Issue 4:**Description**

If a Mellanox card is present in the system, then under **Network Settings**, the port number must be displayed as Port 1 and Port 2, because it is a dual port. But, the port number is displayed as Port 1 for both the ports or the port numbers are not displayed.

Resolution

To distinguish between the port numbers, see the MAC address or the Device Settings.

You can access Device Settings in the following methods:

- During POST, press <F2>, and then click **System Setup**.
- On the Lifecycle Controller Home page, click System Setup, and then click Advanced Hardware Configuration.

Versions/Systems Affected

All LC-supported Dell PowerEdge servers

Issue 5:**Description**

After you successfully update the firmware of a CPLD on a modular server, and then perform a firmware update operation of a component that requires a system restart (such as BIOS), the server is automatically and repeatedly restarted.

Resolution

Perform a Power Cycle operation on the server.

Versions/Systems Affected

All LC-supported Dell PowerEdge servers.

Issue 6:**Description**

Lifecycle Controller may go into an infinite loop when a network operation is tried with an incorrect NFS share name.

Resolution

Restart Lifecycle Controller and retry the operation with the correct NFS share name details.

Versions/Systems Affected

All LC-supported Dell PowerEdge servers.

Issue 7:

Description

On the Dell 12th generation of PowerEdge servers, while deploying the operating system by selecting the UEFI boot mode, an error message is displayed when you click **Finish**. This error occurs if you try to connect the optical drive or virtual media after you launch Lifecycle Controller.

Resolution

Reboot the server and ensure that you connect the optical drive or virtual media before launching Lifecycle Controller.

Versions/Systems Affected

All LC-supported Dell PowerEdge servers.

Issue 8:

Description

If NPAR is enabled, Lifecycle Controller might show unexpected behavior when configuring network settings.

Resolution

Disable the **NPAR** option and execute the network setting configurations. To disable the **NPAR** option, go to **System Setup-> Device Setting**.

Versions/Systems Affected

All LC-supported Dell PowerEdge servers.

Issue 9:

Description

The process of retrieving IPv6 address from the DHCP server with VLAN connection takes a few minutes.

Resolution

Wait for a few minutes and check the Network Settings page to view the assigned IPv6 address.

Versions/Systems Affected

All LC-supported Dell PowerEdge servers.

LC GUI - Limitations

- Lifecycle Controller supports the following characters for user name and password:
 - Alphabets (a-z, A-Z)
 - Digits (0-9)
 - Special characters (-, _, .)
- While updating iDRAC firmware using a tool other than Lifecycle Controller, Lifecycle Controller must not be open, or running, because it results in an unknown behavior. Use Lifecycle Controller after the firmware is successfully updated.
- If the iDRAC firmware update is interrupted for any reason, wait for 30 minutes before attempting another firmware update.
- From Lifecycle Controller UI, only Windows operating system can be deployed by using software RAID controller.
- Firmware update is supported only for LAN On Motherboards, Network Daughter Cards, and network adapters from Broadcom, QLogic, and Intel, and some of the QLogic and Emulex fiber channel cards. For the list of supported fiber channel cards, see *Lifecycle Controller GUI v2.30.30.30 User's Guide*.
- After the CPLD firmware is updated on modular servers, on the View Current Versions page, under Firmware update, the firmware update date is displayed as 2000-01-01, regardless of the actual update date. The updated date and time is displayed on the basis of time zone that is configured on the server.
- Rollback is not supported for CPLD.
- On some modular systems, after a firmware update, the Lifecycle Log displays the date in the time stamp as 1999-12-31, instead of the date on which Firmware Update was performed.

- Some properties related to devices installed in PowerEdge VRTX system are not displayed while viewing the current hardware inventory.
- Lifecycle Controller can import and view an iDRAC license, but it cannot export or delete the iDRAC license.
- The iSCSI offload feature can be enabled only on two of the available four ports. If the iSCSI offload attribute is enabled on a card, and is replaced by another card whose iSCSI offload mode is also enabled on the other two ports, an error is thrown. The firmware will not allow the attribute to be set, because it is already set on the other two ports.
- Windows OS supports both the manual installation and unattended installation features. However, Lifecycle Controller supports the unattended installation feature for Windows and RHEL-7 operating systems only.
- VLAN configuration is not supported on all vendor FC cards and the following Emulex cards:
 - Emulex OneConnect OCe14102-U1-D 2-port PCIe 10GbE CNA
 - Emulex OneConnect OCm14104-U1-D 4-port 10GbE rNDC CNA
 - Emulex OneConnect OCm14102-U5-D 2-port 10GbE Mezz CNA
 - Emulex OneConnect OCm14102-U4-D 2-port 10GbE bNDC CNA
 - Emulex OneConnect OCe14102-N1-D 2-port PCIe 10GbE NIC
 - Emulex OneConnect OCm14104-N1-D 4-port 10GbE rNDC NIC
 - Emulex OneConnect OCm14102-N5-D 2-port 10GbE Mezz NIC
 - Emulex OneConnect OCm14102-N6-D 2-port 10GbE bNDC NIC
- Lifecycle Controller displays two drive names for some CDs or DVDs such as the one containing operating systems.
- Network operations such as Update, Export, or Import may take more time than expected. The delay may occur because the source or destination share is not reachable or does not exist, or due to other network issues.
- Lifecycle Controller displays a warning message if the operating system selected for installation and the operating system on the media used are different. However, while installing Windows operating systems, the warning message appears only when the bit count (x86 or x64) of the operating system does not match. For example, when Windows Server 2008 x64 is selected for installation and Windows Server 2003 x64 media is inserted,
- Lifecycle Controller proceeds with the installation without displaying a warning message.
- Lifecycle Controller does not support operating system deployment on Dell Precision workstation R7910.
- When NPAR is enabled, the port numbers displayed on the **Lifecycle Controller Network Settings** page (**Settings->Network Settings**) do not match with the port numbers displayed on the **Device Settings** page (**System Setup->Advanced Hardware Configuration-> Device Settings**).
- The word encrypted is incorrectly translated as scripted in the Step 3 OS deployment Spanish help page.
- Operating system installation might fail if the server has only PCIe NVMe SSD drives, and if you have selected BIOS as boot mode. If the server has both RAID and non-RAID hard disks (NVMe SSD), it displays the RAID configuration option. However, the non-RAID disks are not displayed on the RAID configuration page.
- When you update the firmware on a Broadcom NetXtreme and QLogic BCM57xx and BCM57xxx (previously known as Broadcom NetXtreme II) adapters the following issue occurs:
 - After installing the QLogic-specific firmware update package on the BCM57xx or BCM57xxx adapter family, the rollback version is not available if the previously installed firmware was provided by a legacy shared firmware update package. However, if the legacy shared firmware version is available as a rollback version for the Broadcom NetXtreme adapter, then the same version will be available for the QLogic BCM57xx and BCM57xxx adapters.

This issue occurs because separate firmware update packages are provided for the Broadcom NetXtreme adapters and QLogic BCM57xx and BCM57xxx adapters due to the acquisition of the Broadcom NetXtreme II cards by QLogic. Prior to the acquisition, a common shared firmware update package was provided.

- The following Intel network cards do not display all ports on the **Comparison** page during a firmware update and also do not support rollback:
 - Intel(R) Ethernet Converged Network Adapter X710 - Quad Port
 - Intel(R) Ethernet Converged Network Adapter X710 - Dual Port
 - Intel(R) Ethernet 10G 4P X710/I350 rNDC

- Intel(R) Ethernet 10G 4P X710 SFP+ rNDC
- Intel(R) Ethernet 10G 4P X710-k bNDC
- Intel(R) Ethernet 10G 2P X710-k bNDC
- While installing the operating system on Dell 12th generation of PowerEdge servers by using Lifecycle Controller web interface, ensure that the virtual media is attached on the server before BIOS boot.

LC-RS - Fixes

None.

LC-RS - Important Notes

None.

LC-RS - Known Issues

After updating to iDRAC v2.30.30.30, all hard drive firmware install time and date will be reset to the iDRAC boot time in the software inventory. Any future hard drive updates will address the software inventory install time for hard drives. This issue is only for the hard drives and only until the next hard drive update process.

LC-RS - Limitations

- The drivers exposed by Lifecycle Controller are present in a read-only device labeled OEMDRV, and the device is active for 18 hours. In a Microsoft(r) Windows(r) and Linux environment, the drivers are automatically installed and no further action is required. In Red Hat Enterprise Linux version 4.8 only, the drivers are not automatically installed and you have to install the drivers manually after the OS installation has been completed.
- If the boot mode is set to UEFI in BIOS (F2 setup) and if you launch System Services (F10) and Deploy OS, the installation may fail or you may not be able to boot to the OS after the installation. Always make sure that the boot mode is set to BIOS in F2 setup before launching Lifecycle Controller and deploying the OS.
- You may see a no optical device found error if you have a non-usable DVD/CD in the optical drive. This error does not mean that there are no optical devices on the system. If you remove the non-usable media, then this error is resolved.
- To maintain compatibility with other iDRAC configuration tools, it is recommended that only digits (0-9), alphanumeric (a-z, A-Z) and hyphen (-) characters be used when entering a “Name” or “Password” string. When entering a “Domain Name”, such as ‘x123.com’, a period (.) character is also permissible.
- When attempting a Platform Update through an FTP server, specifying a valid proxy server but selecting an invalid proxy type causes Lifecycle Controller to halt for a long period (possibly over 30 minutes) before it returns to normal operation.
- If you see this error message “Unable to find a boot device on which to install the operating system. Verify boot disk availability.” and if you have a USB key plugged in to the system after booting to Lifecycle Controller, remove the USB key before deploying the operating system.
- If you are updating iDRAC firmware using a tool other than Lifecycle Controller, do not run Lifecycle Controller during the firmware update because doing this results in an unknown behavior. After the firmware is successfully updated, you can safely use Lifecycle Controller.
- When configuring the FTP server for your repository in the platform update, you may get a message that indicates that a network connection exists with your FTP server; however, it may mean that the validation process needs some extra time depending on your network setting. Click **OK** on the message box, and try one more time to connect to the FTP server.
- Account access can be disabled only if there is more than one user enabled on the iDRAC. To enable users, access the iDRAC Web-based GUI. Navigate to the **Users** section under the **Network/Security** tab and enable users as needed. Note that at least one more user needs to be enabled to disable the account access in the Lifecycle Controller. In the iDRAC Configuration Wizard, the DNS Domain Name may contain a maximum of 64 ASCII characters.

- When attempting a Platform Rollback, there may be a two minute delay before Rollback tasks are displayed on the screen.
- In the iDRAC Configuration Wizard, there is no a selection for auto-attached on the Virtual Media Configuration page.
- During an UEFI based SUSE Linux Enterprise Server 10 and SUSE Linux Enterprise Server 11 installation, make sure that no additional USB or block storage devices are connected to the system. If there are one or more USB or block storage devices plugged into the system, the auto loading of drivers from the embedded storage fails. This fails because the current implementation of SUSE Linux Enterprise Server installer reads only from one USB or block storage device.
- If an invalid SD card is attached to the system, the values shown for “Health” and “Available Space” options are not applicable.
- An “Invalid Update Package” error message is displayed, when
 - the folder containing the Update Package is not accessible.
 - the Update Package is not present on the USB mass storage device.
 - name of the Update Package is incorrect.
- Only Windows operating system can be deployed on systems with software RAID controller.
- Using Platform Update, you cannot update components such as Complex Programmable Logic Device, Backplane, and Physical Disk. However, the View Current Versions table displays these components.
- The SATA drives and their firmware version are not displayed on the View Current Versions page of Platform Update. To view the SATA drives and their firmware information, use OpenManage Server Administrator or OpenManage Storage Services.
- The PCIe SSD drives and their firmware versions are not displayed on the View Current Versions page of Platform Update.
- Collect System Inventory On Reboot (CSIOR) must to be run before enum is successful.
- BCM57xx /BCM57xxx updates Limitations - When you update the firmware on Broadcom NetXtreme I and QLogic BCM57xx/BCM57xxx (previously known as Broadcom NetXtreme II) Ethernet adapters, you may notice failure or incorrect rollback version displayed based on the firmware update used. This behavior occurs because separate firmware update packages are provided for the Broadcom NetXtreme adapters and QLogic BCM57xx and BCM57xxx adapters due to the acquisition of the Broadcom NetXtreme II cards by QLogic. Prior to the acquisition, a common shared firmware update package was provided.

Limitations on updating firmware on Broadcom and QLogic adapters using iDRAC interfaces such as WS-MAN, RACADM, iDRAC GUI, and Lifecycle Controller UI:

 - Rollback of Broadcom NetXtreme I to 7.10.X and QLogic BCM57xx and BCM57xxx Ethernet adapters to 7.12.X from the iDRAC GUI may result in failure of rollback to 7.12.X.
 - Updating Broadcom NetXtreme I to 7.10.X and QLogic BCM57xx and BCM57xxx Ethernet adapters to 7.12.7 results in updating both Broadcom NetXtreme I and QLogic BCM57xx and BCM57xxx to 7.10.X.
 - Downgrading to version 7.10.X on a system with Broadcom NetXtreme I 7.10.X and QLogic BCM57xx and BCM57xxx Ethernet adapters 7.12.X results in displaying the QLogic BCM57xx and BCM57xxx Ethernet adapters rollback version as NULL even though it is updated to 7.10.X.
 - Repository updates to Broadcom NetXtreme I and QLogic BCM57xx and BCM57xxx Ethernet adapters works only with iDRAC version 2.10.10.10 or later.
 - QLogic BCM57xx and BCM57xxx adapters may be displayed as Broadcom or QLogic depending on the interface used such RACADM or WS-MAN.
- Part replacement feature is not supported for PCIe SSD devices.

Security - Fixes

Multiple security updates.

Security - Important Notes

None.

Security - Known Issues

None.

iDRAC - Installation

Installation Instructions

- From the Windows host operating system (managed node), run the Dell Update Package for Windows and follow the instructions on the update wizard.
- From the Linux host operating system (managed node), run the Dell Update Package for Linux from the shell prompt. Follow the instructions displayed on the console.
- From the management station, remotely update the firmware using the iDRAC8 web interface:
 1. Extract the firmware image self-extracting file to the management station.
 2. Open the iDRAC8 web interface using a supported web browser.
 3. Log in as administrator.
 4. Go to **Overview -> iDRAC Settings -> Update and Rollback -> Update**. The **Firmware Update** page is displayed.
 5. Click **Browse**, select the **.d7** firmware image file that you extracted (step 1), or the Dell Update Package (DUP) for Windows, and click **Upload**.
 6. Wait for the upload to complete. After the upload is completed, the **Update Details** section displays the firmware file uploaded to iDRAC and the status.
 7. Select the firmware file and click **Install** or **Install and Reboot**. If it is a DUP, **Install** dynamically changes to **Install and Reboot** and at the same time the **Install Next Reboot** is activated. When you click **Install and Reboot** or **Install Next Reboot**, the message “Updating Job Queue” is displayed.
 8. Click **OK**. The **Job Queue** page is displayed, where you can view and manage the firmware update. After the update is completed, iDRAC8 restarts automatically. For more information, see the *iDRAC User's Guide* available at dell.com/idracmanuals.

Upgrade

Not applicable.

Uninstallation

Not applicable.

Lifecycle Controller Remote Services - Client Tools

Use the WinRM and OpenWSMAN CLI client tools to send WS-MAN commands to Lifecycle Controller.

WinRM

WinRM is a Windows native WS-MAN client. It is recommended to use WinRM 2.0 on Windows Management Stations. WinRM 2.0 is installed by default as a part of Windows 7 and Windows Server 2008 R2. It can also be installed as a part of the Windows Management Framework Core package on the following systems:

- Windows Server 2008 SP1
- Windows Server 2008 SP2
- Windows Server 2003 SP2
- Windows Vista SP1
- Windows Vista SP2
- Windows XP SP3

For more information on how to install WinRM 2.0 as a part of the Windows Management Framework Core package, see article 968929 in the Microsoft Knowledge Base at:

<http://go.microsoft.com/fwlink/?LinkId=186253>

Recommended WinRM Client Configuration:

- MaxBatchItems = 50
- MaxTimeoutms = 60000
- MaxEnvelopeSizekb = 150
- NetworkDelaysms = 60000

Sample WinRM Command (Enumeration Operation):

```
winrm e cimv2/DCIM_SystemView?__cimnamespace=root/dcim -u:[idrac user]
-p:[idrac password] -r:https://[idrac ip address]/wsman -encoding:utf-8
-a:basic -SkipCNcheck -SkipCAcheck -format:Pretty
```

Note: Lifecycle Controller uses a self-signed certificate for HTTPS (SSL) communication. Self-signed certificates are not accepted by the WinRM client and WinRM commands do not work without these options: `-SkipCNcheck` and `-SkipCAcheck`

OpenWSMAN CLI

OpenWSMAN CLI is an open source Linux WS-MAN client. OpenWSMAN CLI source code and installation details are available at:

<http://sourceforge.net/projects/openwsman/files/wsmancli>

Sample OpenWSMAN CLI Command (Enumeration Operation):

```
wsmman enumerate http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/DCIM_SystemView -h
(idrac ip address) -P 443 -u (idrac user) -p (idrac password) -v -j utf-8 -y basic -R -o
-m 256 -N root/dcim -c cert_name.cer -V
```

Note: Lifecycle Controller uses a self-signed certificate for HTTPS (SSL) communication. Self-signed certificates are not accepted by the OpenWSMAN CLI client and WS-MAN commands do not work without these options: `-c`, `-v`, and `-V`. See the *OpenWSMAN CLI readme* for details on these options.

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.

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 and 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.

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

- For iDRAC and Lifecycle Controller documents — dell.com/idracmanuals
- For Enterprise System Management documents — dell.com/openmanagemanuals
- For Serviceability Tools documents — dell.com/serviceabilitytools
- For Client System Management documents — dell.com/OMConnectionsClient
- For OpenManage Connections Enterprise systems management documents — dell.com/OMConnectionsEnterpriseSystemsManagement
- For OpenManage Connections Client systems management documents — dell.com/OMConnectionsClient

Information in this document is subject to change without notice.

© 2016 Dell Inc. All rights reserved.

Reproduction of these materials in any manner whatsoever without the written permission of Dell Inc. is strictly forbidden. Trademarks used in this text: Dell(TM), the DELL logo, PowerEdge(TM), PowerVault(TM), Compellent(TM) and OpenManage(TM) are trademarks of Dell Inc. Intel(R) is a registered trademark of Intel Corporation in the U.S. and other countries. Microsoft(R), Windows(R), Windows Server(R), Internet Explorer(R), Hyper-V(R), Active Directory(R), ActiveX(R) and Windows Vista(R) are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. Red Hat Enterprise Linux(R) and Enterprise Linux(R) are registered trademarks of Red Hat, Inc. in the United States and/or other countries. The term Linux(R) is a registered trademark of Linus Torvalds, the original author of the Linux kernel. SUSE(TM) is a trademark of Novell Inc. in the United States and other countries. XenServer(R) is a registered trademark of Citrix Systems, Inc. in the United States and/or other countries. Mozilla(R) and Firefox(R) are registered trademarks of Mozilla Foundation. VMware(R) and ESX(TM) are registered trademarks or trademarks of VMware, Inc. in the United States and/or other jurisdictions. Java(TM) is a registered trademark of Oracle and/or its affiliates. Google(R) and Chrome(TM) is a trademark of Google Inc. Mac(R), Macintosh(R), and Mac OS(R), Safari(R), and OS X(R) are trademarks of Apple Inc., registered in the U.S. and other countries. Matrox(R) is a registered trademark of Matrox. Broadcom(TM) is a trademark of Broadcom Corporation and/or its affiliates in the United States, certain other countries, and/or the EU. QLogic(R) is a registered trademark of QLogic Corporation. AMULET(TM) is a trademark of AMULET Development Corp. Brocade(R) is a registered trademark of Brocade Communications Systems, Inc., in the United States and/or in other countries.

Other trademarks and trade names may be used in this publication to refer to either the entities claiming the marks and names or their products. Dell Inc. disclaims any proprietary interest in trademarks and trade names other than its own.

Revision: A01