Integrated Dell Remote Access Controller 7 (iDRAC7) Version 1.50.50 and Lifecycle Controller 2 Remote Services Version 1.3.0

Release Notes



Release Notes

Integrated Dell Remote Access Controller 7 (iDRAC7)

iDRAC7 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 2 Remote Services (LC2-RS)

LC2-RS provides advanced embedded systems management and is delivered as part of iDRAC7. LC2-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

iDRAC7 1.50.50 LC2 1.3.0

Release Date

December 2013

Previous Version

iDRAC7 1.45.45 LC2 1.1.5

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

iDRAC7 and LC2-RS is supported on the following systems:

- PowerEdge M520
- PowerEdge M820
- PowerEdge R320
- PowerEdge T620
- PowerEdge M420
- PowerEdge R820
- PowerEdge T320
- PowerEdge R620PowerEdge M620
- PowerEdge R720
- PowerEdge R720xd
- PowerEdge R520
- PowerEdge R420
- PowerEdge T420
- DCS2210
- Compellent SC8000

What is Supported?

Supported Managed Server Operating Systems for iDRAC7

The following operating systems support iDRAC7:

- Windows Server 2008 SP2 (32-bit)
- Windows Server 2008 SP2 (64-bit)
- Windows Server 2008 SP2 R2 (64-bit)
- Microsoft Server 2012 Essentials
- Microsoft Server 2012 R2.
- Red Hat Enterprise Linux (RHEL) version 5.9
- Red Hat Enterprise Linux (RHEL) version 6.4
- Red Hat Enterprise Virtualization (RHEV) Hypervisor 5.9
- Red Hat Enterprise Virtualization (RHEV) Hypervisor 6.4
- SUSE Linux Enterprise Server (SLES) version 10 SP4 (64-bit)
- SUSE Linux Enterprise Server (SLES) version 11 SP2
- vSphere version 5.0 U2
- vSphere version 5.1 U2
- vSphere version 5.5
- XenServer version 6.1
- XenServer version 6.2

Supported Web Browsers for iDRAC7

- Microsoft Internet Explorer 8
- Microsoft Internet Explorer 9
- Microsoft Internet Explorer 10
- Safari version 5.2
- Safari version 6.0
- Mozilla Firefox version 22.
- Mozilla Firefox version 23
- Google Chrome version 27
- Google Chrome version 28

What's New

iDRAC7

The following are the new features in this release:

- Automatically configure components in a server or multiple servers using DHCP provisioning
- Update firmware from using firmware image file on a local system or on a network share, connecting to the FTP site, or a network repository that contains a catalog of available updates.
- Schedule automatic firmware updates.
- Rollback firmware for all devices supported by Lifecycle Controller.
- Configure and schedule server configuration backups.
- Enabling or disabling HTTPs redirection.

- Configure VNC Server to view remote desktop using mobile devices
- Configure LOM or USB NIC as the OS to iDRAC Pass-through channel
- Enable or disable I/O Optimization
- Enabling events to be logged into OS log
- Export the Lifecycle log entries to a network share or to the local system.
- Improved Virtual Media menu options:
 - o Connect or disconnect Virtual Media session from Virtual Media menu.
 - o Specify the location of the image file that is created from the folder.
 - o Create an image from the folder without enabling Virtual Media session.
 - o New interface when Virtual Media is launched in standalone mode.
- Combined detailed Virtual Media performance statistic with Virtual Console statistic in Stats dialog
- Removed Remote File Share from First Boot device and Next Boot list
- Clear SEL logs.
- Display SEL logs in iDRAC Settings Utility.
- Record log in, log out, and log in failure events in the Lifecycle Controller logs.
- Store certificate permanently in user's certificate store. Disabling Warning Messages While Launching Virtual Console Or Virtual Media Using Java plug-in.
- Improved Remote File Share options.
- Use the iDRAC Service Module to perform monitoring functions similar to Server Administrator but in an out-of-band environment.
- Configure SNMP and SMTP ports
- Schedule automatic remote diagnostics
- Switch on or switch off the front panel LED from System Summary page
- Use wildcard certificates
- Use certificates signed by an intermediate CA
- Generate Tech Support Report similar to Dell System E-support Tool report
- Display the following information for storage devices:
 - o Sector size that the physical disks and virtual disks uses to store data.
 - o Wear-out level or remaining life of the Solid State Drive (SSD) connected to a PERC.
 - o T10 Protection Information (PI) capable drives supported by the controllers.
 - T10 PI capability for physical disks.
 - o T10 PI capability is enabled or disabled for the virtual disk.
 - o Controller boot mode support for controllers.
 - o Enhanced auto import of foreign configuration is enabled or disabled for the controller.
 - o Spans with different span length support for RAID 10 Virtual Disks.

iDRAC7 – Fixes

- If common logging is enabled in iDRAC7, CEM storage inventory takes more than 40 minutes. If common logging is disabled (default setting), CEM storage inventory takes up to four minutes for the maximum configuration.
- Launching Virtual console using Google Chrome browser, does not launch Java Web Start automatically even after mapping launch application.
- On PowerEdge M420 blade servers, the iDRAC GUI's **WWN/MAC** page reports the A1 and A2 network devices as reversed on systems in sub-slots b and d. A1 MAC addresses are reported in the A2 section of the iDRAC Web interface, and A2 MAC addresses are reported in the A1 section. MAC addresses for systems in sub-slots a and c are reported correctly.

- Drives that cannot be accessed may be displayed in the Virtual Media configuration menu when using the Java plug-in. This occurs if inaccessible network shares or storage devices are configured on the management station (for example, by the IT department).
- On 12th generation PowerEdge blade servers, in the iDRAC Web Interface, the **WWN/MAC** page does not correctly report the chassis-assigned MAC addresses for the Intel i350 mezzanine card. The secondary MAC for the B1/C1 device is reported as the primary MAC for B2/C2 device, and vice versa.
- In the iDRAC7 Web interface, while viewing the CPU details under **Overview** -> **Hardware**, the CPU status is displayed with a warning icon for a CPU that is absent and the status is blank.

iDRAC7 - Important Notes

- License Requirements:
 - Software licensing has replaced hardware licensing. For more information, see, the *Dell License Manager User's Guide*.
 - 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 iDRAC7 Web interface.
- When using iDRAC7 Web interface in Firefox 3.6 if the SD card is removed while partition creation is in-progress, "The operation has been completed successfully" message is displayed.
- For the Virtual Console and Virtual Media to function properly, iDRAC7 Web URL must be added to the Local Intranet site list and the security level for the Local Intranet zone should be set to Medium-Low. In addition, if Virtual Console and Virtual Media are configured to use Java plug-in, then disable the **Enhanced Security Mode** in Internet Explorer. If this is not possible, then in iDRAC7, 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 iDRAC7 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 iDRAC7 Enterprise, when the Virtual Console is disabled and Virtual Media is disabled and/or detached, the console port (default: 5900) remains open. For iDRAC7 Express (no Virtual Console or Virtual Media) the console port is open.
- If auto-negotiation is enabled while setting iDRAC7 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 iDRAC7 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 iDRAC7 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 iDRAC7 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, are not 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 Linux system, after launching the Virtual Console, if you click on a menu item and it remains open, the Ctrl + Alt + L keystroke sent from the iDRAC to the host system does not lock the host system. The behavior is the 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 iDRAC7 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/

- For iDRAC7 1.30.30 or later versions, if the iDRAC is configured using the Import Configuration XML operation, "user password is changed" messages are logged in the Lifecycle Log. An LC Log entry is generated and the default settings are applied for all local user accounts that are not configured through the XML configuration file.
- 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 www.dell.com/support/manuals 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 IVYBRIDGE CPU is installed on PowerEdge R720, R720xD, R620, T620, or M620 systems, the iDRAC7 firmware update from 1.45.45 to an earlier version is not allowed (example, from 1.45.45 to 1.40.40 or to 1.37.35, and so on).
- After an iDRAC7 firmware update, a few of the iDRAC7 Web interface panels or navigation menu
 items may contain incorrect or invalid entries. To resolve this, clear the browser cache(s) after
 updating the iDRAC7 firmware.
- 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 a
 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.

iDRAC7 - 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.
- Go to General -> Network Settings.
- 3. Select Direct Connection and click OK.

Versions/Systems Affected

All iDRAC7 supported Dell PowerEdge systems.

Issue 2:

Description

Known iDRAC7 IPv6 limitations:

- o Email alerts are not sent if the iDRAC7 DNS Domain Name is not specified when using IPv6.
- Network File Share (NFS) mounting does not work with IPv6. This applies to features such as connecting a remote file share or exporting the Lifecycle Controller log to a network shared location.
- o Firefox versions 4.x, 6.x, and 7.x may prevent the iDRAC7 Web interface from opening when using IPv6. For more information see: https://bugzilla.mozilla.org/show_bug.cgi?id=633001
- o On Microsoft Windows Operating Systems, when launching Virtual Console using Java plug-in or when launching Video Capture plug-in, empty warning dialogs may appear. Continue to click **OK** to launch the plug-in. This is a known limitation in Java Web Start if it's Network Settings is set to use browser settings. To resolve this, set the Java's Network Settings to Direct Connection.

Resolution (only for logging in to iDRAC7 Web interface):

- 1. Register iDRAC7 to DNS.
- 2. Make sure the client system also has this DNS in its DNS list.
- 3. Enable IPv6 and disable IPv4.
- 4. Log in to iDRAC7 using the Fully Qualified Domain Name (FQDN).

For launching Virtual Console with IPv6 in Firefox 4.0 or later versions, from Windows management system, run ipconfig /flushdns in the command prompt.

Versions/Systems Affected

All iDRAC7 supported Dell PowerEdge systems.

Issue 3:

Description

The **Learn More** pop-up on the **License** page does not appear using IE.

Resolution

Add *.dell.com to the trusted sites in the **Security** settings. See the *Internet Explorer help documentation* for more information.

Versions/Systems Affected

All iDRAC7 supported Dell PowerEdge systems.

Issue 4:

Description

On Windows operating system, to add a folder as an image using the Virtual Media, the Desktop directory must be in the HOMEPATH directory. The HOMEPATH directory may vary depending on the Windows installation, but the images created from the "Add Folder as Image" operation always reside in the %HOMEDRIVE%\%HOMEPATH%\Desktop directory. The HOMEDRIVE must be set to C drive. Otherwise, the operation fails.

Versions/Systems Affected

All iDRAC7 supported Dell PowerEdge systems.

Issue 5:

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:

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

Versions/Systems Affected

All iDRAC7 supported Dell PowerEdge systems.

Issue 6:

Description

vFlash functionality remains enabled after firmware update without preserving configuration.

If vFlash functionality is enabled and a firmware update is performed without preserving the configuration (**Preserve Configuration** is not selected), the **vFlash Enabled** option remains selected. This is a known behavior.

Resolution

You must manually enable or disable the vFlash functionality after the firmware update as required. To do this, select or clear the **vFlash Enabled** option in the iDRAC7 Web interface, or use RACADM or WinRM remote service commands.

Versions/Systems Affected

All iDRAC7 supported Dell PowerEdge(TM) systems.

Issue 7:

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/email alerts) for storage devices may not exactly match the sequence in which they occurred.

Resolution

The current state or attribute of the storage device can be checked in any of the iDRAC7 interfaces (example, iDRAC7 Web interface, RACADM and so on).

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7 and out-of-band enabled PERC storage controllers.

Issue 8:

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 iDRAC7 and out-of-band enabled PERC storage controllers.

Issue 9:

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 iDRAC7 reboot or server power cycle to remove the enclosure entries from the consoles.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7 and out-of-band enabled PERC storage controllers.

Issue 10:

Description

Logging in to iDRAC7 Web interface fails with the error message 'RAC0218: The maximum number of user sessions is reached'.

When the temporary folder used by iDRAC7 components is full, it is possible that authentication fails and this error is displayed.

Resolution

Power cycle iDRAC7 to clear the temporary space.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 11:

Description

On Microsoft Windows7 operating system, while launching Virtual Console in native mode using Internet Explorer, the **iDRAC7 Login** page is displayed.

Virtual Console uses plug-ins and due to insufficient privileges plug-in does not load and **iDRAC7 Login** page is displayed.

Resolution

Reboot operating system and log in to iDRAC7 Web interface.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 12:

Description

When selecting browser buttons (forward or back), the GUI pages are not displayed correctly and sometimes the same page re-appears.

iDRAC7 Web interface is a platform management application and all the necessary controls are provided within the application. The Web browser buttons are outside of this application and may not function properly.

Resolution

Use the navigation options within the iDRAC7 Web interface.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 13:

Description

When you log in to iDRAC7 Web interface using Internet Explorer 9.x, contents in few pages are not shown properly. This is a known issue with Internet Explorer.

Resolution

- 1. Press <F12>. The **Internet Explorer 9 Debug** window is displayed.
- 2. Select **Document Mode** -> **Internet Explorer 7**. The browser refreshes and the **iDRAC7 Login** page is displayed.
- 3. Close the **Internet Explorer 9 Debug** window.
- 4. Close all open Internet Explorer windows.
- 5. Open Internet Explorer and log in to iDRAC7.

For more information, see Internet Explorer documentation.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 14:

Description

When an Enterprise or Enterprise Evaluation license expires, Active Directory is disabled automatically.

Resolution

After re-installing the Enterprise or Enterprise Evaluation license, an administrative user can log in as an existing local iDRAC7 user to re-enable Active Directory authentication, using any iDRAC7 interface such

as RACADM or the Web interface. Remote RACADM can be used in a script to batch-enable Active Directory. If a local iDRAC7 user is not enabled or is not configured for remote access, the administrative user must use local RACADM or OpenManage Server Administrator to configure a local user.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 15:

Description

When a power reset is performed, the Virtual Console Viewer menu options (except **File** -> **Exit** and **Help** options) are grayed-out or inaccessible. The 'Link interrupted' message appears at the bottom of Virtual Console Viewer.

Resolution

Due to a temporary network outage, the Virtual Console Viewer menu options are not accessible. The "Link interrupted" message is displayed to indicate that an outage has occurred. This is a temporary problem and the menu options are available when the network is restored.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 16:

Description

iDRAC7 Web interface does not respond when using Internet Explorer.

Resolution

Close all Internet Explorer sessions and open it again to access iDRAC7 Web interface.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 17:

Description

When a driver pack DUP update is performed, the following message is recorded in the Lifecycle log after the driver pack update entry.

RAC0400: iDRAC memory low iDRAC is running low on memory. System performance may be degraded. Recommended Action: No response action is required.

Resolution

No workaround is required. This is a normal condition when the memory is lower than the threshold for around 30 seconds and returns to normal after the driver pack update finishes.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 18:

Description

Resetting iDRAC7 to default values action may take between four to six minutes to complete.

Resolution

Wait for iDRAC7 to reboot before performing any other action.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 19:

Description

In the iDRAC7 Web interface -> **Overview** -> **Server** -> **Power/Thermal** -> **Power Monitoring** tab -> **Power** section, the **Power Unit** selector only changes the unit of measure. Due to the oscillating nature of power, the **Present Reading** cannot be displayed as units for **Current (Amps)**.

Resolution

None.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 20:

Description

On all Intel NICs, each port cannot be assigned different iSCSI initiator name (by assigning the value for IscsiInitiatorName). If the name is changed for one port, the same change is applied to all ports.

Resolution

None

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 21:

Description

When virtual world wide name and virtual world wide port name attributes on a NIC partition are set using the WS-MAN interface, the new values are not updated in the iDRAC7 Web interface or when racadm getsysinfo is run.

Resolution

Use WS-MAN interface to obtain the updated values for those attributes.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 22:

Description

The Predicted Capacity Status attribute of the storage controller battery reported by iDRAC7 interfaces may not be accurate in some situations.

Resolution

The Predicted Capacity Status attribute has been deprecated. To view the correct battery state, use the storage battery state/status values instead.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7 and out-of-band enabled PERC storage controllers.

Issue 23:

Description

When inventory changes are done to the storage sub-system (such as inserting and removing disk drives, and so on) before or during POST/reboot, the corresponding events may not be recorded in Lifecycle log. SNMP traps/email alerts may not be generated and the inventory changes may not be correctly reflected in the iDRAC7 interfaces (example, iDRAC7 Web interface, RACADM and so on).

Resolution

To view the correct storage inventory data, perform a server power cycle (cold boot).

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7 and out-of-band enabled PERC storage controllers.

Issue 24:

Description

If a NIC card, with partitioning enabled, is replaced with a similar type of card, without partitioning enabled, the configurations from the previous card are not applied to the new card.

Resolution

After the previous card is replaced with a new card and the system is powered on, go to OptionROM (CTRL-R) and enable partitioning. Save, exit, and reboot the system.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 25:

Description

When using DownloadServerPublicKey Or DownloadClientCerts commands in WSMAN, the invocation may fail when the iDRAC7 system is not ready to service the operations. This may happen when host system is in a POST stage.

Resolution

Wait until host system is past the POST stage and retry the command.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 26:

Description

When launching Virtual Console viewer using ActiveX plug-in, a blank window appears and Virtual Console viewer does not launch.

Resolution

This may be due to incompatible binaries from a previous version. Remove temporary files from the download location on your system (for example, **C:\windows\Downloaded Program Files**) and retry.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 27:

Description

When video player is launched, it launches both a playback control window and a playback window. On a Linux RHEL6.0 workstation, if the playback window loses focus, then you cannot switch back using the mouse.

Resolution:

This is an issue with the RHEL 6.0 version of Linux. Close the playback control window by selecting 'x' and select the playback program on task bar using the mouse to display the playback window. If you need to view the playback controls again, select its menu item from the playback window.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 28:

Description:

When running the Virtual Media client on Windows 7 or Windows Server 2008 R2, the Virtual Media client may not be able to access a floppy disk in read-write mode because of a problem with the client workstation operating system.

Resolution:

Apply the operating system update to the Windows 7 or Windows Server 2008 R2 client workstation operating system as specified in the following link: http://support.microsoft.com/kb/2496290.

Versions/Systems Affected

All iDRAC7 supported Dell PowerEdge systems being accessed by a Windows 7 or Windows Server 2008 R2 client workstation without the specified update applied.

Issue 29:

Description:

There is no option to eject the USB drive on SUSE Linux Enterprise Server 11. The only option to unmap virtual USB is to force unmapping using the Virtual Media window.

Resolution:

Unmount virtual USB before forced unmapping to make sure the server has completed all the pending tasks before the drive is unmapped.

Versions/Systems Affected

All iDRAC7 supported Dell PowerEdge systems.

Issue 30:

Description:

Learn More option in the **Licensing** page does not work on Safari browser.

Resolution:

Disable the popup blocker for Safari browser.

Versions/Systems Affected

All iDRAC7 supported Dell PowerEdge systems.

Issue 31:

Description:

In a Linux operating system, after logging in to the iDRAC Web interface using a Firefox browser and you launch the Virtual Console, sometimes Virtual Console window does not respond to keyboard input.

Resolution

Close and re-launch the Virtual Console.

Versions/Systems Affected

All iDRAC7 supported Dell PowerEdge systems.

Issue 32:

Description:

When there is no license installed on a value line platform like T420, you cannot perform any firmware update through iDRAC Web interface using Dell Update Packages (DUPs). This is the correct behavior, but the displayed error message is not correct. Error message is "LIC006: The License has expired. Obtain a replacement license and import it."

Resolution:

Obtain an appropriate license then try again. If the problem persists, contact the technical support. See the product documentation to choose the contact method that is convenient for you.

Versions/Systems Affected:

All Dell PowerEdge systems with iDRAC7.

Issue 33:

Description:

If you try to upload any other certificate other than a valid PKCS#12 format file, the iDRAC Web interface displays an incorrect error message.

Resolution:

Upload a valid PKCS#12 format certificate file.

Versions/Systems Affected:

All Dell PowerEdge systems with iDRAC7.

Issue 34:

Description:

On applying Delete Custom SSL Certificate when no certificate (CSC) is available, GUI displays the message: RAC0507 Unable to find the requested resource. Do one of the following and retry the operation:

- o Turn on the system.
- Make the resource available.

Resolution:

No impact as such, the request to delete non-existent CSC results in this message.

Versions/Systems Affected:

All Dell PowerEdge systems with iDRAC7.

Issue 35:

Description:

After uploading a custom signing certificate to iDRAC and restarting iDRAC, when you log in to iDRAC Web interface using Firefox browser, the security certificate error is displayed. This is because the serial number of the certificate that was stored in the Firefox browser cache is the same as the serial number of the certificate on iDRAC.

Resolution:

Remove the browser certificate in the cache and log in to the iDRAC Web interface. For information on removing certificates, see the Firefox documentation. If the problem persists:

- 1. Log in to iDRAC using racadm and run sslresetcfg.
- 2. Perform steps to upload custom signing certificate.

Issue 36:

Description

On PowerEdge M520, if a Broadcom 57810S DP 10G KR Mezz 55 GHP or Qlogic DP 10 Gb SFP+/DA CNA Mezz RX8GJ is installed, an additional blank entry is displayed in the System Inventory page of the Web interface and on other interfaces such as RACADM, WSMAN, and Lifecycle Controller GUI.

Resolution

This is a false entry and can be ignored.

Versions/Systems Affected

Dell PowerEdge M520

Issue 37:

Description

Sometimes invalid characters are displayed on the server console screen after exiting iDRAC Virtual Console.

Resolution

Launch virtual console and clear the **Automatic System Lock** option.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 38:

After an iDRAC7 firmware update, some of the iDRAC7 Web interface panels or navigation menu items may contain incorrect or invalid entries.

Resolution

Clear your browser cache(s) after updating the iDRAC7 firmware.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 39:

Description

Credential vault contents may be erased when upgrading to or downgrading from iDRAC7 firmware version 1.40.40, resulting in different symptoms.

Resolution

Back up the Credential Vault data (uploaded certificates, and so on) before upgrading to or downgrading from iDRAC7 1.40.40 firmware. After the firmware update is complete, reload the Credential Vault contents.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 40:

Description

In the iDRAC7 Web interface > **System Inventory** page, the AMULET Video Mezzanine card description is displayed as "Whistler[Radeon E6760]" and the description for Manufacturer is displayed as "Advanced Micro Devices[AMD]nee ATI".

Resolution

No impact and can be ignored.

Versions/Systems Affected

PowerEdge M420, PowerEdge M520, and PowerEdge M620 systems with iDRAC7.

Issue 41:

Description

When the host operating system is Windows Server 2012 R2, if the Virtual Media device is mapped to the host system and if you try to perform firmware update to an earlier version using Dell Update Package (DUP), the firmware update process may stop.

Resolution

If you want to update the firmware to an earlier version (example, from 1.45.45 to 1.40.40 or to 1.37.35, and so on), use the iDRAC7 Web interface instead of a DUP package. If you have to use a DUP, then before running the DUP, make sure there are no active Virtual Media sessions on iDRAC.

Versions/Systems Affected:

All 12th generation Dell PowerEdge servers with Windows Server 2012 R2 operating system.

Issue 42:

Description

When performing firmware update using local racadm with -pud option (update from the host server), if racadm is not invoked from the installation directory (example, C:\Program Files\Dell\Sysmgt\iDRAC\), then after the firmware update is completed successfully, the following error message may be displayed:

"Waiting iDRAC Fully Initialized Timeout"

Resolution

Run local racadm from the racadm installation directory.

Issue 43:

Description

In the iDRAC7 Web interface, the System Inventory or Network Device page for Fibre Channel devices does not display the current firmware version or vendor name details for Emulex FC16 card.

Resolution

Update the FC16 firmware twice from the operating system (not using the iDRAC update method). For more information, see Emulex documentation.

Versions/Systems Affected

All Dell PowerEdge systems with iDRAC7.

Issue 44:

Description

In systems with iDRAC 1.30.30 firmware version, the sslencryptionstrength racadm command does not work for both firmware and local racadm interfaces.

Resolution

Use the remote racadm interface, iDRAC Web interface, or WSMAN to configure the SSL encryption length. You can also use idrac.webserver.LowerEncryptionBitLength object.

Versions/Systems Affected

All 12th generation Dell PowerEdge servers with iDRAC7 version 1.30.30.

Issue 45:

Description

After exiting virtual console from iDRAC sometimes invalid characters appear on the server screen when is there is no desktop running on the server operating system.

Resolution

Launch Virtual Console and clear the Automatic System Lock option.

Versions/Systems Affected

All iDRAC7 supported Dell PowerEdge systems.

Issue 46:

Description

Full export of Lifecycle Controller logs in Mac OS through Safari browser generates **Log.xml** file instead of **Log.xml.gz** file and the **Log.xml** contains partial content.

Resolution

- 1. Open Safari in Mac.
- 2. Go to Safari > Preferences > General.
- 3. Clear the **Open 'safe' files after downloading** option.

Versions/Systems Affected

All iDRAC7 supported Dell PowerEdge systems.

Issue 47:

Description

In some scenarios, typically when a PCIe SSD is removed from a server slot and a different PCIe SSD is inserted within a span of 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 iDRAC7 and PCIe SSDs.

Issue 48:

Description

On servers with Windows 2008 SP2 64-bit operating system, the iDRAC Virtual NIC USB Device is not discovered automatically (or enabled). The iDRAC Virtual NIC USB Device appears under unknown devices with yellow bang (or warning symbol).

Resolution

See steps recommended by Microsoft to manually update the RNDIS driver for this device.

Versions/Systems Affected

All Dell PowerEdge Systems with iDRAC7.

Issue 49:

Description

If the system with Linux operating system is stand alone or connected to a network hub, the communication to iDRAC through the OS to iDRAC pass-through channel for LOM pass-through mode does not work in the following scenarios:

- For systems shipped from factory, initially the iDRAC network is in dedicated mode and the OS to iDRAC pass-through feature for LOM pass-through mode is disabled. The network cable is installed at LAN1. The host and the iDRAC IPs are configured for static IP addresses in the same subnet. Switch the iDRAC network from dedicated to shared mode, enable OS to iDRAC pass-through and set the pass-through mode to LOM.
- 2. When LAN1 is connected to a switch:
 - a. Both iDRAC and the host IPs are configured for static IP addresses in the same subnet.
 - b. Either iDRAC or the host IP is configured for static IP address and the other one received the IP through DHCP.
 - c. iDRAC and host both receive the IP through DHCP.

Resolution

To enable OS to iDRAC pass-through in shared mode:

- 1. Set the static IP address on the host system using the Network Manger GUI or edit the /etc/sysconfig/network-scripts/ifcfg-eth0 file.
- 2. Set the static IP address for the iDRAC in the same subnet
- 3. Enable OS to iDRAC pass-through feature. For the steps, see *iDRAC7 User's Guide* at **www.dell.com/esmmanuals**.
- 4. Reboot the host system.
- 5. After restarting the host system, connect to the iDRAC using the static iDRAC IP address.

Versions/Systems Affected

All Dell PowerEdge Systems with iDRAC7.

Issue 50:

Description

When logging into iDRAC console, occasionally log in fails with PKCS security error.

Resolution

Run the racadm sslresetcfg command to clear this issue and log in successfully. This installs the default certificates and any self-signed or customer SSL certificates are replaced with the default certificate.

Versions/Systems Affected

All Dell PowerEdge Systems with iDRAC7.

Issue 51:

Description

When the operating system language is English and in Internet Explorer, if you change the browser's language settings to a localized language, and then launch the iDRAC7 IP, the pages are displayed in English instead of the selected language. However, if it is the language specific operating system, the pages are displayed in the localized language.

Resolution

Use Firefox browser to display the pages as per the language specified in the language settings.

Versions/Systems Affected

All Dell PowerEdge Systems with iDRAC7 1.50.50.

iDRAC7 - 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 iDRAC7 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 lowlevel drives.
- Alert notification for battery events does not work.
- Operating system information on the System Summary page does not display after rebooting iDRAC7 until the operating system is rebooted.
- iDRAC7 users with user names containing a semi-colon (;) cannot log in to iDRAC7 through SSH.
- In the iDRAC7 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 e-mail address specified in iDRAC7 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 iDRAC7 Web interface or updating the BIOS or the firmware using the iDRAC7 update method:
- For SLES 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.
- Performing a graceful shutdown from the iDRAC7 Web interface or updating the BIOS or the firmware using the iDRAC7 update method:

- For SLES 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.
- OS to iDRAC pass-through feature does not work when the host operating system is Linux.
- 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.

LC2-RS - Fixes

BITS104701: PCIe SSD configuration should be blocked through Remote Services

LC2-RS - Important Notes

If the iDRAC7 version is 1.50.50, Lifecycle Controller version must to be updated to 1.3.0.x.

LC2-RS - Known Issues

Issue 1:

Description

Lifecycle Controller may not perform the required operation correctly if incompatible iDRAC firmware is used.

Resolution

Update the Lifecycle Controller version to 1.3.0.x if the iDRAC7 version is 1.50.50.

Versions/Systems Affected

All LC2-RS supported Dell PowerEdge systems.

LC2-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 (FlO) 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 result in 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 SLES 10 and SLES 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 SLES 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.

iDRAC7 - Installation

Prerequisites

Before you update iDRAC7 firmware using local RACADM or the Dell Update Package, perform the following procedures. Otherwise, the firmware update operation may fail.

- 1. Install and enable the appropriate IPMI and managed node drivers.
- 2. If your system is running a Windows operating system, enable and start the Windows Management Instrumentation (WMI) service.
- 3. If you are using iDRAC7 Enterprise and your system is running SUSE Linux Enterprise Server (version 10) for Intel EM64T, start the Raw service.
- 4. Disconnect and unmount Virtual Media.

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 iDRAC7 Web interface:
 - 1. Extract the firmware image self-extracting file to the management station.
 - 2. Open the iDRAC7 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, iDRAC7 restarts automatically.

For more information, see the iDRAC7 User's Guide available at

 $\frac{http://www.dell.com/support/Manuals/us/en/555/Product/integrated-dell-remote-access-cntrllr-7-v1.50.50}{cntrllr-7-v1.50.50}$

Upgrade

iDRAC7 firmware cannot be installed on platforms that support iDRAC6 and cannot be used to upgrade iDRAC6 firmware to iDRAC7. For more information, see the *iDRAC7 User's Guide* available at http://www.dell.com/support/Manuals/us/en/555/Product/integrated-dell-remote-access-cntrllr-7-v1.50.50.

Uninstallation

Use the rollback feature to return to the previous installed version of iDRAC7 firmware.

For more information, see the iDRAC7 User's Guide available at

 $\frac{http://www.dell.com/support/Manuals/us/en/555/Product/integrated-dell-remote-access-cntrllr-7-v1.50.50.$

Lifecycle Controller 2 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
- NetworkDelayms = 60000

Sample WinRM Command (Enumeration Operation):

```
winrm e cimv2/DCIM_SystemView?__cimnamespace=root/dcim -u:[idrac user]
-p:[idrac password] -r:https://[idrac ip adddress]/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):

```
wsman enumerate http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/DCIM_SystemView -h (idrac ip adddress) -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 Remote Enterprise System Management documents dell.com/esmmanuals
- 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.

© 2013 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 Linux 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 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.