

Integrated Dell Remote Access Controller 7 (iDRAC7) and iDRAC8 with Lifecycle Controller for Dell PowerEdge Servers

Version 2.40.40.40

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 iDRAC7 and 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 iDRAC7 and iDRAC8. 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 2.40.40.40 (Applies to iDRAC7 and iDRAC8)

Lifecycle Controller 2.40.40.40

Release date

August 2016

Previous versions

2.35.35.35

2.30.30.30

2.32.31.30

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).

Platforms affected

Supported system for iDRAC7, iDRAC8, and LC:

12th generation systems

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

13th generation systems

- PowerEdge C4130
- PowerEdge C6320
- PowerEdge FC430
- PowerEdge FC630
- PowerEdge FC830
- PowerEdge FD332
- PowerEdge M630
- PowerEdge M830
- PowerEdge R230
- PowerEdge R330
- PowerEdge R430
- PowerEdge R530
- PowerEdge R530XD
- PowerEdge R630
- PowerEdge R730
- PowerEdge R730XD
- PowerEdge R830
- PowerEdge R930
- PowerEdge T130
- PowerEdge T330
- PowerEdge T430
- PowerEdge T630
- Precision Rack 7910
- DCS 6400
- DCSF S3500
- DSS 1500
- DSS 1510
- DSS 2500
- NX3230
- NX3330
- NX430

What is supported?

License requirements

Software licensing has replaced hardware licensing. For more information, see the iDRAC8 v2.40.40.40 *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 v2.40.40.40 *User's Guide* available at dell.com/idracmanuals.

Supported managed server operating systems for systems for iDRAC7 and iDRAC8

The following operating systems are supported:

- 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 - (Dell 11th and 12th generation servers only)
- Windows Server 2008 SP2 x64 - (Dell 11th and 12th generation servers 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 with SP1)
- Windows Server 2016
 - WinPE 4.0 32bit

- WinPE 4.1 64bit
- WinPE 5.1 64bit
- WinPE 10.0
- Nano
- RedHat
 - RHEL 7.2
 - RHEL 6.8
- SLES
 - SLES 12 SP1
 - SLES 11 SP4
- VMware
 - vSphere 5.5 U3
 - vSphere 6.0 U2
 - vSphere 2016
- Citrix
 - XenServer 7.0

Supported web browsers for iDRAC7 and iDRAC8

- Microsoft Internet Explorer 9
- Microsoft Internet Explorer 10
- Microsoft Internet Explorer 11
- Microsoft EDGE
- Safari version 7.1
- Safari version 8.0
- Mozilla Firefox version 45
- Mozilla Firefox version 46
- Google Chrome version 49
- Google Chrome version 50

What's new

Authentication

N/A

BIOS/UEFI

N/A

Hardware (server/storage platform specific)

- Added support of Amulet card on PowerEdge M830.
- Added support for dual HBA330 on PowerEdge R730xd.

iDRAC/LC firmware only

- FIPS 140-2 capable.
- Added support for Redfish version 1.0.2.
- Added support for Server Configuration Profile via Redfish interface.
- Added firmware update support for the following PSUs:
 - Flextronics 1600W PSU
 - PSU 1100W -48v DC support on DSS 2500
 - PSU 550W HVDC PSU support on DSS 1500/1510
 - 1100W 240V DC and 220V AC.
 - 13G Lite-On 750W PSU
 - 13G Lite-On 1100W PSU

Monitoring and alerting

N/A

Networking and I/O

N/A

OS deployment

N/A

Scripting (all CLI related items)

N/A

Security

- By default, support for TLS 1.1 and higher is enabled. You can select **TLS 1.0 and higher**, **TLS 1.1 and higher**, or **TLS 1.2 only**. See Note 2 in the **Important Notes** section.
- OpenSSL upgrade. See **Note 3** in the **Important Notes** section.
- Downgrading CMC firmware using shared update from iDRAC is not allowed when FIPS is enabled in CMC.

Storage and PERC

N/A

Support Assist and parts replacement

N/A

Updates

- Support for riser configuration for Dell PowerEdge R730xd with an Intel Xeon E5-2600 v4 family processor installed.
- Support for Server Configuration Profile (SCP) via Redfish Interface. SCP Import, Export, and Preview are supported.

Fixes

- Fixed mouse attach/detach issue on VNC Viewer.
- Implemented fix for PowerEdge C6320 to show OEM FRU content in ipmitool FRU command.
- Fixed hard drive thermal protection and as a result fan speeds may increase on certain systems.

Authentication

N/A

BIOS/UEFI

N/A

Hardware (server/storage platform specific)

N/A

iDRAC/LC firmware only

N/A

Monitoring and alerting

N/A

Networking and I/O

N/A

OS deployment

N/A

Scripting (all CLI related items)

Security

N/A

Storage and PERC

N/A

Support Assist and parts replacement

N/A

Updates

N/A

Important notes

Note 1:

If you execute multiple jobs for various components and iDRAC DUP is one of the jobs, ensure that iDRAC job is the last job in the queue. Ensure that all other jobs are either in SCHEDULED or COMPLETED state before you execute the iDRAC job.

Note 2:

Windows Server 2012, Windows Server 2008 R2, and Windows 7 do not support TLS 1.2 and TLS 1.1. Install the following update to enable TLS 1.2 and TLS 1.1 as a default secure protocols in WinHTTP in Windows:

<http://support.microsoft.com/kb/3140245/EN-US>

Note 3:

Supports LDAP authentication with OpenDS. OpenDS must have DH key larger than 768 bits.

Known issues

- If you enumerate the enclosure view's WSMAN command on a system while one PSU-cable is removed, the primary status of the enclosure view is reported as **Healthy** instead of **Warning**.
- After iDRAC reset or firmware update, the ServerPoweredOnTime (a property in RACADM and WS-MAN) may not be populated until the host server is restarted.
- On performing warm boots, occasionally a message is displayed by BIOS indicating that there is a KCS failure (error code UEFI0039). No action required for this error. The error is caused by the timing change in the response of the daemons on the iDRAC. Rebooting the host restores normal boot behavior.
- Upon execution of racadm swinventory or racadm hwinventory command via a local RACADM interface, the inventory details are not fetched if all the OS drives (A-Z) are mapped. Unmap an existing OS drive to resolve this issue.
- Using local RACADM proxy, if you configure a CMC user name that consists of a space, the command does not successfully create the user name. Use CMC RACADM, Remote RACADM, or Remote RACADM proxy interface.
- Redfish response contains a HTTP header named Allow, when the HTTP response code is 405. The list may contain PATCH, DELETE, POST, GET, HEAD values, but all of them may not be supported.
- If a requested resource is not present, HTTP response status code may not be always 404.
- Scrolling-down using the mouse does not work in VNC server.
- When a new PCIe SSD drive is hot plugged in an empty drive bay slot, PrepareToRemove or SecureErase features on that drive fail unless the host is rebooted and it completes the CSIOR cycle.
- Sometimes, iDRAC logs the following message to the Lifecycle Controller log:
PWR2262: "The Intel Management Engine has reported an internal system error."
Also, it logs the following message within the next few minutes:
PWR2264: "The Intel Management Engine has reported normal system operation."
No action is required. All Dell PowerEdge systems with iDRAC8 are affected.

- Server Configuration Profile (SCP) Import and Preview configuration does not give details about the values that are modified via SCP Redfish. These configuration details are not available via Redfish interface. For configuration details, run the command - "racadm lcllog viewconfigresult -j JID_XXXXXXXXXXXX".
- When you enumerate DCIM_NumericSensor using the WS-MAN interface, the SettableThreshold property displays 0, which indicates that the LowerThresholdNonCritical field can be set. However, for performance-statistic sensors, this is not a settable field. For these sensors, you can only set the UpperThresholdNonCritical field, indicated by the value of 1.
- Sometimes, when using WSMAN, an "Internal SSL Error" is reported and the WSMAN command fails. If this happens, retry the command to resolve the issue.
- Sometimes, SLES 12 OS installation may fail with an error "Please make sure your installation medium is available. Retry?". Retry the installation to resolve the issue.
- The command "racadm eventfilters get -c idrac.alert.all" to view all available event filter configurations may fail using local RACADM. Use either firmware RACADM or remote RACADM to run the command.
- While updating or after you update the OS Collector (OSC) package from 1.1 to 2.1, the version number displayed in the iDRAC interface contains only the number and not the prefix 'OSC_'.

Limitations

Item 1:

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 iDRAC7 and iDRAC8.

Dell tracking: JIT-28891

Item 2:

Description:

For Intel cards, the PHY link on the shared LOM ports stays up during a DC power cycle.

Resolution:

The NIC can only be reset by doing an AC power cycle

Versions/Systems affected

PowerEdge R730

Dell tracking: JIT-30630

Item 3:

Description:

On Dell 13th generation PowerEdge servers with PERC 830, create 98 foreign drive on it, then Login to iDRAC GUI, under Storage -> Controller page -> Setup Tab, selecting PERC 830 Controller from the drop down box, Foreign configuration section shows "STOR006: Unable to complete the operation."

Resolution:

Press Ctrl+R or in-band agent like OMSS can be used to preview foreign configuration. Issue is seen only with Preview, actual foreign configuration import through racadm will work.

Versions/Systems affected

PowerEdge R630

Dell tracking: JIT-12251

Item 4:

Description:

On NANO operating system, you cannot install a firmware or driver DUP if it is in .exe format.

Versions/Systems affected:

All

Item 5:

Description

Deployment of the Windows server operating systems (OS) using Lifecycle

Controller (LC) may fail with one of the following message:

- Windows installation cannot continue because a required driver could not be installed.
- Product key required.
- Windows cannot find the software license terms.

This happens when the Windows setup copies the drivers to the scratch space (X: drive) and the scratch space becomes full.

Resolution

To resolve this issue, do any of the following:

Remove all the installed add-on devices before starting the OS installation.

After the OS installation is complete, connect the add-on devices and manually install the remaining drivers using Dell Update Packages (DUPs).

To avoid physically removing the hardware, disable the PCIe slots in the BIOS.

Increase scratch space size beyond 32 MB using DISM set-scratchspace command when creating customized deployment. See [http://technet.microsoft.com/en-us/library/dd799261\(v=ws.10\).aspx](http://technet.microsoft.com/en-us/library/dd799261(v=ws.10).aspx) for more details.

Platforms Affected

This issue may occur on 12th and 13th generation Dell PowerEdge servers.

Item 6:

Description

The SSM task header displays **RAID-Update** for both RAID and non-RAID updates.

Resolution

No action is required.

Platforms Affected

All.

Dell Tracking: JIT-29065

Item 7:

Description:

On Dell PowerEdge T630 servers, all PCIe SSDs are reported on the Physical Disk page of iDRAC GUI but on the Enclosure Summary page, the PCIe SSD connected to slot 0 is not reported.

Resolution:

Use Physical Disk page in the iDRAC GUI to see all available PCIe SSDs.

Versions/Systems affected

PowerEdge T630

Dell tracking: JIT-32017

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 iDRAC web interface:
 1. Extract the firmware image self-extracting file to the management station.
 2. Open the iDRAC 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.
 8. When you click **Install and Reboot** or **Install Next Reboot**, the message **Updating Job Queue** is displayed.
 9. Click **OK**. The Job Queue page is displayed, where you can view and manage the firmware update.

After the update is completed, iDRAC 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 OpenWSMAN CLI client tool to send WS-MAN commands to Lifecycle Controller.

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 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, go to dell.com/contactdell.

Accessing documents from Dell Support website

To access the documents from Dell Support website:

1. Go to dell.com/support/manuals.
2. In the **Choose from all products**, click **View products**.
3. Click **Software and Security** and then click the required link.
4. To view the document, click the required product version.

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

| | |
|--|--|
| iDRAC and LC documents | dell.com/idracmanuals |
| Enterprise System Management | dell.com/openmanagemanuals |
| Serviceability tools | dell.com/serviceabilitytools |
| OpenManage Connections Enterprise Systems Management | dell.com/OMConnectionsEnterpriseSystemsManagement |
| OpenManage Connections Client Systems Management | dell.com/OMConnectionsClient |

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