iDRAC8 with Lifecycle Controller Version 2.70.70.70

Release Notes

Notes, cautions, and warnings

(i) **NOTE: A NOTE indicates important information that helps you make better use of your product.**

⚠ **CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.**

⚠ **WARNING: A WARNING indicates a potential for property damage, personal injury, or death.**

Rev. A01

Contents

Overview

The Integrated Dell Remote Access Controller (iDRAC) is designed to make server administrators more productive and improve the overall availability of Dell servers.

iDRAC alerts administrators to server issues, helps them perform remote server management, and reduces the need for physical access to the server. Additionally, iDRAC enables administrators to deploy, monitor, manage, configure, update, and troubleshoot Dell EMC servers from any location without using any agents. It accomplishes this regardless of the operating system or hypervisor presence or state.

iDRAC also provides 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 interface, such as Redfish or RACADM.

Topics:

*   Version

Version

iDRAC8 with Lifecycle Controller 2.70.70.70

Release date

October 2019

Previous version

*   2.63.60.61
*   2.62.60.60
*   2.61.60.60
*   2.60.60.60
*   2.52.52.52
*   2.50.50.50
*   2.41.40.40
*   2.40.40.40
*   2.35.35.35
*   2.32.31.30
*   2.30.30.30

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).

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Platforms affected

- PowerEdge C4130
- PowerEdge C6320
- PowerEdge C6320p
- PowerEdge FC430
- PowerEdge FC630
- PowerEdge FC830
- 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

What is supported

License requirements

- Software licensing has replaced hardware licensing.
- Many features in Lifecycle Controller are licensed. You must install the appropriate license to use these features.

For more information, see the iDRAC 2.70.70.70 User's Guide available at www.dell.com/idracmanuals.

Supported managed server operating systems and hypervisors

Microsoft Windows

- Server 2016 Essentials Edition
- Server 2016 Standard Edition
- Server 2016 Datacenter Edition
- Server 2019 Essentials Edition
- Server 2019 Standard Edition (GUI and Server Core)
- Server 2019 Datacenter Edition (GUI and Server Core)
- Server 1809
- Server 2012 (all editions)

RedHat

- RHEL 7.6
- RHEL 8.0

SLES

- SLES 15 SP1

Ubuntu

- Ubuntu 19.04.2

VMware

- ESXi 6.5 U3
- ESXi 6.7 U2

Supported web browsers

- Microsoft Internet Explorer 11
- Microsoft EDGE
- Safari version 12
- Mozilla Firefox version 64
- Mozilla Firefox version 65
- Google Chrome version 76
- Google Chrome version 77

Java support

- Java — Oracle version

OpenSource tools

- OpenJDK 8u202
- Adopt Open JDK
- You may utilize an open source version of AdoptOpenJDK or OpenJDK ("Adopt Open JDK") subject to the terms and conditions of the Adopt Open JDK community at https://adoptopenjdk.net/.
- You use Adopt Open JDK at your own risk. Adopt Open JDK may not meet your requirements or expectations. It could include quality, technical or other mistakes, inaccuracies or typographical errors.
- Dell does not provide support or maintenance for Adopt Open JDK.
- Dell makes no express warranties, and disclaims all implied warranties, including merchantability, fitness for a particular purpose, title, and non-infringement as well as any warranty arising by statute, operation of law, course of dealing or performance or usage of trade regarding Adopt Open JDK.
- Dell has no liability to you for any damage that arise out of or relate to your use of Adopt Open JDK.

New and enhanced features

Hardware

- Added support for 750W MM PSU for PowerEdge platforms
- Added support for 2000W MM PSU for PowerEdge C4130
- Added support for quad port Intel 10 GbE 4P X710-t Adapter

iDRAC and LC firmware

- Added support for firmware update for Intel P4500, P4600 and Express Flash NVMe PCIe SSD drives
- Added support for firmware update for iDSDM
- Added support for firmware update via HTTPS
- Added support for Redfish 2016 R2 and R3 APIs including PCIe device inventory, OS Host Interface access and Privilege registry
- Added support for Redfish 2017 R1, R2, and R3 APIs including boot source configuration, virtual media management and maintenance window scheduling
- Added support for query parameters
- Added Restful API support for vMedia operations

OS deployment

- Added IPv6 support to USB NIC OS pass through

Automation—API and CLI

- Added support for boot order enable/disable control to SCP and RACADM
- Added support for GetRemoteServicesAPIStatus in RACADM

Security

- Added support for SCP operations via HTTPS
- Added support for SNMP and Syslog alerting to user tracking LCL messages
- Added support for force change password for user with default credentials

Storage and storage controllers

- N/A

Fixes

Automation — API and CLI

- 97643: Fixed an issue with ValueName regex not matching the schema definition for some of the properties in the BIOS Attribute Registry and the Boot Sources Registry returned by Redfish API

iDRAC and LC firmware

- 105420: Fixed an issue of blank screen display while launching iDRAC virtual console with HTML5 plug-in through CMC
- 103471: Fixed an issue with the Message ID for RAC1195 Summary not displaying the complete IPv6 address information when changing the Virtual Console, Virtual Media, or the RFS settings using the iDRAC web interface
- 114604: Fixed an issue with iDRAC firmware update from the operating system failing with an error about virtual device being unreachable because of BitLocker or other security software
- 131586: Fixed an issue with firmware update failing when only IPv6 address is provided in Lifecycle Controller GUI
- 133500: Fixed an issue with Lifecycle Controller operations that are applied through System Services Manager exceeding on-screen timeout limit
- 133897: Fixed an issue with Firmware update using FTP with Socks4 proxy type not working in iDRAC GUI
- 109964: Fixed an issue of custom syslog port reverting to default value in iDRAC 7 and 8 after rebooting iDRAC
- 103703: Fixed an issue with iDRAC Certificate Signing Request generating an empty file when all the values are correctly populated

Networking and I/O

- 104244: Fixed an issue causing the network port to change from LOM 3/4 to dedicated port during a firmware update. If no cables are plugged in the dedicated network port, iDRAC cannot be accessed remotely.

OS deployment

- 133826: Fixed an issue with Firmware update using the action Simple Update with OS deployment pack through Remote Share in Redfish interface

Security

- 113070: Fixed CVE-2018-15473
  - (i) **NOTE:** CVE-2018-15473 was fixed through a patch to the OpenSSH version. As a result, not all scanners are aware of the patch and may flag this as a potential vulnerability based on the OpenSSH version.
- 117351: Added HSTS header (Port 443)
- 124554: Added HSTS header (Port 5900)

Miscellaneous

- 130966: Fixed an issue with repository update job displaying as failed in the job queue even though all firmware updates that are included in the repository are successful

Important notes

1. When FCP is enabled, 'Default Password Warning' setting is disabled after changing the default user password.
2. Keyboard interactive authentication has been enabled on the iDRAC SSH Server to provide enhanced security. SSH clients now require both password authentication and keyboard interactive authentication before allowing a user to log in to iDRAC. If you see a message - "Further authentication required.", you have to include keyboard interactive authentication in your login attempt.
3. After updating the iDRAC firmware to version 2.70.70.70 or later, LC logs may display a message—"Version change detected for PCIe SSD firmware. Previous version: X.X.X, Current version: X.X.X.". Ignore this log entry.
4. Failover LOM is not supported with Intel 10 GbE 4P X710-k bNDC on a modular server.
5. The drivers that are exposed by LC are present in a read-only drive that is labeled OEMDRV and the drive is active for 18 hours. During this period:

   · You cannot install any DUPs.
   · LC cannot invoke CSIOR.

   However, if an AC power cycle (cold boot) is performed, the OEMDRV drive is automatically deleted.
6. CPLD firmware update has no impact on Trusted Platform Module enablement.
7. Depending on the virtual storage device attached through iDRAC, that is, USB drive or CD/DVD .ISO file, LC displays **Virtual Floppy** or **Virtual CD** respectively.
8. 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.
9. When you reset or update the iDRAC, you must reboot LC if it is launched already. If you fail to reboot, LC may behave unexpectedly.
10. On PowerEdge FC630, PowerEdge FC830, and PowerEdge FC430 systems, part replacement is not supported if a single PERC (FS332) is replaced with a dual PERC (FD332) or vice versa.
11. After performing a firmware update or rollback operations from LC, the host is rebooted by default. Reboot the host server again to display the updated firmware versions in the View Current Versions wizard.
12. To record updates in the Lifecycle log, ensure that the Lifecycle Controller and iDRAC are from the same release.
13. If Lifecycle Controller and iDRAC are not from the same release, the Lifecycle Log displays either blank messages or messages with a '~' character.
14. When you update a 12th generation PowerEdge server backplane-expander firmware for PowerEdge R920 firmware to version 0.33 or 2.03, the comparison page displays only one expander entry. However, firmware for both the expanders is updated.
15. Fibre channel NIC cards with two or four ports are displayed as a single port card in Lifecycle Controller. However, all ports are updated when a firmware update is performed.
16. The option to enable or disable the disk cache policy for SWRAID controllers is supported only on SWRAID controller driver version 4.1.0-0025 or later.
17. ResetKeys under Action in the SecureBoot resource is available only on systems with supported BIOS.
18. The SecureBoot navigation link is available under Computer System only if the SecureBoot feature is supported by the BIOS installed on the system.
19. Rollback is not supported for CPLD.
20. If SMBv2 share fails in Lifecycle GUI, ensure that:

    · The **Digitally sign communications** option is disabled
    · Permissions to access the folder/file are granted
    · Folder/file name does not have a space
    · Share contains fewer files and folders
21. The certificate warning message that is displayed during an HTTPS transaction is due to the server presenting a certificate issued by an entity that is not trusted by the system, or certificate that is presented by the server is expired.
22. Firmware update from downloads.dell.com using LCUI with HTTP and HTTPS proxy is not supported.

Limitations

- Operating system installation fails when the OS media volume name (label) is blank. It is recommended to add a valid volume name for OS media (USB drive, DVD and so on) before starting the OS installation.
- While installing SUSE Linux Enterprise Server (SLES) operating system, a media verification warning message may be displayed. This message does not impact the OS installation. To proceed, click **Yes**.
- On the previous 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 the Lifecycle Controller.
- While deploying the operating system using LC UI, if the current boot mode is set to UEFI, and you change the boot mode to BIOS, an error id displayed stating that the boot mode could not be set. The system reboots after you click Ok. However, with the next boot to LC UI, the boot mode is changed to BIOS and the boot device that is selected during the OS deployment is discarded.
- Firmware update using downloads.dell.com fails while using HTTP as Network Share and proxy type in Lifecycle Controller GUI.
- Some of the supported components are not displayed on the **Firmware Update** > **View Current Versions** page.
- If Flex Address is enabled on Chassis Management Controllers (CMC), iDRAC and LC do not display the same MAC addresses. To view the chassis-assigned MAC address, use the iDRAC web interface or the CMC web interface. Go to **General** > **Network Settings**.
- Lifecycle Controller may go into an infinite loop when a network operation is tried with an incorrect NFS share name. Restart Lifecycle Controller, and retry the operation with the correct NFS share name details.
- If NPAR is enabled, LC might show unexpected behavior when configuring network settings. Disable NPAR option, and run the network setting configurations. To disable the NPAR option, go to **System Setup** > **Device Setting**.
- The process of retrieving IPv6 address from the DHCP server with VLAN connection takes a few minutes. Wait for a few minutes and check the **Network Settings** page to view the assigned IPv6 address.
- Deployment of Windows Server operating systems using LC may fail with one of the following messages:

  - 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 driver to the scratch space (X: drive) and the scratch space becomes full. To resolve this issue, do any of the following:

  - Remove all the installed add-on devices before starting the operating system 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. For more details, see Microsoft's documentation.
- LC supports the following characters for username and password:

Alphabets	a-z, A-Z
Numbers	0-9
Special characters	- , _ , .

- If LC is open or running while you are updating iDRAC firmware using a tool other than LC, you may notice unexpected behavior. Use Lifecycle Controller after the firmware is successfully updated.
- If the iDRAC firmware update is interrupted, you may have to wait up to 30 minutes before attempting another firmware update.
- From LC UI, only Windows systems can be deployed by using software RAID controller.
- Firmware update is supported only for LAN on Motherboards (LoM), Network Daughter Cards (NDC), 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 the LC 2.60.60.60 User's Guide available at **dell.com/idracmanuals**.
- After the CPLD firmware is updated on modular systems, the firmware update date is displayed as 2000-01-01 on the **View Current Versions** page. The update date and time is displayed according to the time zone configured on the server.
- On some modular systems, after a firmware update, the Lifecycle Log displays the timestamp as 1999-12-31 instead of the date on which the firmware update was performed.
- While viewing the current hardware inventory, some properties related to devices installed in PowerEdge VRTX system are not displayed.

- LC can import and view an iDRAC license but cannot export or delete the iDRAC license. The iDRAC license can be deleted from iDRAC GUI.
- The iSCSI offload attribute can be enabled only on two of the four available ports. If a card, which has this attribute that is enabled on two of its ports, is replaced with another card that has the attribute that is enabled on the other two ports, an error occurs. The firmware does not allow the attribute to be set because it is already set on the other two ports.
- Windows operating systems support both the manual 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 10 GbE CNA
  - Emulex OneConnect OCm14104-U1-D 4-port 10 GbE rNDC CNA
  - Emulex OneConnect OCm14102-U5-D 2-port 10 GbE Mezz CNA
  - Emulex OneConnect OCm14102-U4-D 2-port 10 GbE bNDC CNA
  - Emulex OneConnect OCe14102-N1-D 2-port PCIe 10 GbE NIC
  - Emulex OneConnect OCm14104-N1-D 4-port 10 GbE rNDC CNA
  - Emulex OneConnect OCm14102-N5-D 2-port 10 GbE Mezz CNA
  - Emulex OneConnect OCm14102-N6-D 2-port 10 GbE bNDC CNA

- LC may display multiple drive names for some CDs or DVDs, such as the ones 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.
- If the operating system selected for installation and the operating system on the media that are used are different, LC displays a warning message. However, while installing Windows operating system, the warning message appears only when the bit count (x86 or x64) of the operating system does not match. For example, if Windows Server 2008 x64 is selected for installation and Windows Server 2008 x86 media is used, the warning is displayed.
- LC does not support operating system deployment on Dell Precision Workstation R7920.
- When NPAR is enabled, the port numbers that are displayed on the LC Network Settings page (**Settings** > **Network Settings**) do not match the port numbers that are displayed on the Device Settings page (**System Setup** > **Advanced Hardware Configuration** > **Device Settings**).
- Lifecycle Controller supports operating system deployment on bootable devices (systems without a RAID controller) in the BIOS mode only.
- In the Spanish help page, the word **encrypted** is incorrectly translated as **scripted** in Step 3 operating system deployment.
- Operating system installation might fail if the server has only PCIe NVMe SSD drives and if you have selected BIOS as boot mode. If 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 RAID configuration page.
- When you update the firmware on a Broadcom NetXtreme and QLogic BCM57xx and BCM57xxx (previously known as Broadcom NetXtreme ||) 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 is available for the QLogic BCM57xx and BCM57xxx adapters.

  The 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 || cards by QLogic. Prior to the acquisition, a common shared firmware update package was provided.

- The following Intel cards do not support firmware rollback and may not display all the ports on the Comparison page while updating the firmware:

  - Intel Ethernet Converged Network Adapter X710 - Quad Port
  - Intel Ethernet Converged Network Adapter X710 - Dual Port
  - Intel Ethernet Converged Network Adapter XL710
  - Intel Ethernet 10G 4P X710/1350 rNDC
  - Intel Ethernet 10G 4P X710 SFP + rNDC
  - Intel Ethernet 10G 4P X710-k bNDC
  - Intel Ethernet 10G 2P X710-k bNDC
  - Intel Ethernet 40G 2P XL710 QSFP + rNDC
  - Intel Gigabit I350-t LOM
  - Intel Ethernet 10G X520 LOM
  - Intel Ethernet 10G 2P X550-t Adapter

- While installing the operating system on the previous generation PowerEdge servers by using LC UI, ensure that the virtual media is attached on the server before BIOS boot.
- On NANO operating system, you cannot install a firmware or driver DUP if it is in .exe format.
- During the RAID Configuration, on the Step 3 of 5: Select Physical Disk page, the scroll bar of Select Physical Pool table is not displayed. To view the scroll bar:

- Hover your mouse pointer over the right edge of the table.
- Press Tab until the table is selected.

This issue is observed when you select the RAID level as 0, 5, 6, 10, 50, or 60.
- When using Internet Explorer or Google Chrome to access the HTML5 virtual console from a Windows operating system, the floating menu at the top of the window may not be displayed.
- DNS IPV6 cannot be assigned while configuring IPV6 IP from Lifecycle Controller GUI, when DHCP is selected as the source.

Known issues

Error message when firmware updated using remote racadm

Description	The following message is displayed when the firmware is updated using remote racadm — Error: Session is not valid.
Workaround	Ignore this message.
Systems affected	All systems supported by this release.
Tracking number	N/A

Error during patch operation of BootSource properties on /redfish/v1/Systems/ System.Embedded.1/

Description	If there is an error during the patch operation of BootSource related properties on /redfish/v1/Systems/ System.Embedded.1/ URI, the output json message is invalid. The expected output is a proper json with the details about the error.
Workaround	N/A
Systems affected	All systems supported by this release.
Tracking number	150658

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 an 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.

For more information, see the iDRAC User's Guide available at **dell.com/idracmanuals**.

Upgrade

N/A

Uninstallation

N/A

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
```

(i) **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.**

Resources and support

For more information about the features of this release, see the documentation for iDRAC 2.70.70.70.

Latest Release Notes

To access the latest Release Notes for this version of iDRAC:

1. Go to www.dell.com/idracmanuals.
2. Click the link for the generation and then click the series version of iDRAC.
3. Click **Documentation**.
4. Click **Manuals & documents**.

Accessing documents using the product search

1. Go to www.dell.com/support.
2. In the **Enter a Service Tag, Serial Number...** search box, type the product name. For example, `PowerEdge` or `iDRAC`.

   A list of matching products is displayed.
3. Select your product and click the search icon or press enter.
4. Click **Documentation**.
5. Click **Manuals & documents**.

Accessing documents using product selector

You can also access documents by selecting your product.

1. Go to www.dell.com/support.
2. Click **Browse all products**.
3. Click the desired product category, such as Servers, Software, Storage, and so on.
4. Click the desired product and then click the desired version if applicable.
   (i) **NOTE: For some products, you may need to navigate through the subcategories.**
5. Click **Documentation**.
6. Click **Manuals & documents**.

Contacting Dell EMC

Dell EMC 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 EMC for sales, technical support, or customer service issues, see www.dell.com/contactdell.

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