

Dell EMC OpenManage Software Support Matrix

Version 9.3.1

Notes, cautions, and warnings

 **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.

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Introduction

The Systems Management Software Support Matrix helps identify OpenManage software and other Dell EMC components that are supported on PowerEdge servers, browsers, and operating systems.

This guide is intended for system administrators and technicians. The guide provides information about the available Dell EMC devices, operating systems that are supported by these devices, and OpenManage components that can be installed on these systems.

Topics:

- [What's new in this release](#)
- [Structure of this guide](#)
- [Accessing documents from the Dell EMC support site](#)
- [Where can I find the Server Administrator one-to-one agent](#)
- [Supported GUI languages](#)
- [Documentation conventions for Dell EMC devices](#)

What's new in this release

- **Support for yx5x platforms:**
 - PowerEdge R6515
 - PowerEdge R7515
- **Supported Linux operating systems:**
 - Red Hat Enterprise Linux 8.0 (Support for yx3x, yx4x and yx5x servers)
 - ESXi 6.5 U3 operating system support on yx5x servers
 - ESXi 6.7 U2 operating system support on yx3x and yx4x servers
 - ESXi 6.7 U3 operating system support on yx3x, yx4x and yx5x servers
- **Supported Network cards:**
 - Mellanox ConnectX-5 Dual Port 25 GbE SFP28 PCIe Adapter
 - Mellanox ConnectX-5 Dual Port 25 GbE SFP28 OCP 3.0 Adapter
 - Intel(R) Gigabit 4P I350-t Adapter
 - Intel(R) Ethernet 10G 2P X710-T2L-t Adapter
 - Broadcom BCM57416 10G BT Dual Port PCIE adapter
 - Broadcom BCM5720 1 Gbps OCP Mezz
 - Broadcom BCM57414 25G SFP Dual Port PCIE adapter
 - QLogic 2x10GE QL41132HxRJ NIC (FH)
 - QLogic 2x10GE QL41132HxRJ NIC (LP)
 - QLogic 2x25GE QL41232HxCU NIC (FH)
 - QLogic 2x25GE QL41232HxCU NIC (LP)
- **Supported web browsers:**
 - Mozilla Firefox version 67
 - Google Chrome version 75
 - Internet Explorer version 11
 - Safari version 12

NOTE:

- For the list of supported operating systems and Dell EMC servers, see the *Dell EMC OpenManage Software Support Matrix* in the required version of OpenManage Software at www.dell.com/OpenManageManuals.
- For more information about any features, see the *Dell EMC OpenManage Server Administrator Online Help*.

Structure of this guide

OpenManage solutions and tools enable customers to quickly respond to problems by helping them to manage Dell EMC servers effectively and efficiently; in physical, virtual, local, and remote environments, operating in-band, and out-of-band (agent-free).

This guide is organized based on in-band and out-of-band management and monitoring.

Accessing documents from the Dell EMC support site

You can access the required documents using the following links:

- For Dell EMC Enterprise Systems Management documents — www.dell.com/SoftwareSecurityManuals
- For Dell EMC OpenManage documents — www.dell.com/OpenManageManuals
- For Dell EMC Remote Enterprise Systems Management documents — www.dell.com/esmmanuals
- For iDRAC and Dell EMC Lifecycle Controller documents — www.dell.com/idracmanuals
- For Dell EMC OpenManage Connections Enterprise Systems Management documents — www.dell.com/OMConnectionsEnterpriseSystemsManagement
- For Dell EMC Serviceability Tools documents — www.dell.com/ServiceabilityTools
- 1. Go to www.support.dell.com.
- 2. Click **Browse all products**.
- 3. From **All products** page, click **Software**, and then click the required link from the following:
 - **Analytics**
 - **Client Systems Management**
 - **Enterprise Applications**
 - **Enterprise Systems Management**
 - **Public Sector Solutions**
 - **Utilities**
 - **Mainframe**
 - **Serviceability Tools**
 - **Virtualization Solutions**
 - **Operating Systems**
 - **Support**
- 4. To view a document, click the required product and then click the required version.
- Using search engines:
 - Type the name and version of the document in the search box.

Where can I find the Server Administrator one-to-one agent

Supported versions of Server Administrator are available at www.dell.com/Support/Home and also on the *Dell EMC Systems Management Tools and Documentation* ISO image.

Supported GUI languages

OpenManage is localized to French, German, Spanish, Simplified Chinese, and Japanese languages.

The following table lists the languages of the OpenManage GUI against the operating system languages. OpenManage supports only the languages listed in the following table.

Table 1. Supported OpenManage GUI Languages

| OpenManage GUI Languages | Operating System | | | | | | | |
|--------------------------|------------------|--------|--------|---------|--------------------|----------|--------|---------------------|
| | English | French | German | Spanish | Simplified Chinese | Japanese | Korean | Traditional Chinese |
| English | X | | | | | | X | X |
| French | | X | | | | | | |
| German | | | X | | | | | |
| Spanish | | | | X | | | | |
| Simplified Chinese | | | | | X | | | |
| Japanese | | | | | | X | | |
| Korean | | | | | | | | |
| Traditional Chinese | | | | | | | | |

Documentation conventions for Dell EMC devices

The following table lists the documentation conventions for Dell EMC devices.

Table 2. Documentation Conventions for Dell EMC Devices

| yx5x servers | yx4x servers | yx3x servers |
|---------------------|---------------------|---------------------|
| R6515 | R240 | C4130 |
| R7515 | R340 | C6320 |
| | T140 | C6320P |
| | T340 | FC 430 |
| | R740xd2 | FC 630 |
| | MX7000 | FC 630 |
| | MX5016s | FC 830 |
| | MX740c | M630 |
| | MX840c | M630-VRTX |
| | R7425 | M830 |
| | R7415 | M830-VRTX |
| | R6415 | R230 |
| | C6420 | R330 |
| | FC 640 | R430 |
| | M640 | R530 |
| | M640-VRTX | R630 |
| | R440 | R730 |
| | R540 | R730 XD |
| | R540 XD | R7910 |
| | R640 | R830 |
| | R740 | R930 |

| yx5x servers | yx4x servers | yx3x servers |
|---------------------|---------------------|---------------------|
| | R740 XD | T130 |
| | R7920 | T330 |
| | R940 | T430 |
| | T440 | T630 |
| | T640 | |
| | C4140 | |

In-band server management and monitoring

In-band server management is the process of managing and monitoring servers using operating system tools, and other inbuilt tools, using OpenManage Server Administrator.

Topics:

- Supported OpenManage Systems Management Software
- OpenManage Server Administrator v9.3.1
- Supported Operating Systems for Server Administrator Web Server on your Managed System Servers
- Supported OpenManage Systems Management Consoles
- Supported web browsers for In-band management and monitoring

Supported OpenManage Systems Management Software

OpenManage systems management software is a suite of applications for Dell EMC devices. This software allows you to manage your system with proactive monitoring, notification, and remote access.

OpenManage systems management software consists of OpenManage Server Administrator.

OpenManage Server Administrator (Server Administrator) is a comprehensive, one-to-one systems management solution, which is designed for system administrators to manage systems locally and remotely on a network.

Server Administrator comprises the following services:

- Server Administrator Web Server
- Server Instrumentation
- Remote Enablement
- Remote Access Controller
- Storage Management

For more information, see the *Dell EMC OpenManage Server Administrator User's Guide* available at www.dell.com/OpenManageManuals.

Supported OpenManage Systems Management Software on Windows Operating Systems

The following table lists the supported OpenManage 9.3.1 installation and systems management software on systems running supported Microsoft Windows operating systems.

An **X** in the intersection of the operating system and the Dell EMC devices column indicates that Server Administrator is supported on that operating system for the corresponding system.

Table 3. Supported OpenManage 9.3.1 Systems Management Software on Systems Running Microsoft Windows Server and Microsoft Windows Small Business Server Operating Systems

| Dell EMC devices | Windows Server 2019 |
|--------------------------------------|---------------------|
| yx5x generation of PowerEdge servers | X |

Table 4. Supported OpenManage 9.3.1 Systems Management Software on Systems Running Microsoft Windows Storage Server, Microsoft Windows Server Operating Systems

| Dell EMC devices | Windows Server 2019 |
|--------------------------------------|---------------------|
| yx5x generation of PowerEdge servers | X |

Supported OpenManage Systems Management Software on Linux Operating Systems

The following table lists the supported OpenManage 9.3.1 installation and systems management software on systems running supported Linux operating system.

An **X** in the intersection of the operating system and the Dell EMC devices columns indicates that Server Administrator is supported on that operating system for the corresponding Dell EMC devices .

Table 5. Supported OpenManage Systems Management Software on Systems Running Linux Operating Systems

| Dell EMC devices | RHEL 8.0 | RHEL 7.6 |
|--------------------------------------|----------|----------|
| yx5x generation of PowerEdge servers | X | X |
| yx4x generation of PowerEdge servers | X | |
| yx3x generation of PowerEdge servers | X | |

Supported OpenManage Systems Management Software On Virtualization Operating Systems

An **X** in the intersection of the operating system and the Dell EMC devices columns indicates that the Server Administrator is supported on that operating system for the corresponding Dell EMC devices.

The following table lists the supported OpenManage 9.3.1 installation and systems management software on systems running supported Virtualization operating systems.

Table 6. Supported OpenManage Systems Management Software on Systems Running Supported Virtualization Operating Systems

| Dell EMC devices | VMware vSphere 6.5 U3 | VMware vSphere 6.7 U2 | VMware vSphere 6.7 U3 |
|--------------------------------------|-----------------------|-----------------------|-----------------------|
| yx5x generation of PowerEdge servers | X | | X |
| yx4x generation of PowerEdge servers | | X | X |
| yx3x generation of PowerEdge servers | | X | X |

OpenManage Server Administrator v9.3.1

OpenManage Server Administrator Web Server allows you to remotely manage and monitor your entire network of managed systems from your system. However, for laptop and desktop you are required to use OM 9.3.1 Web Server. You have to install Server Administrator Web Server on your system and install server instrumentation on the managed systems.

Supported Microsoft Windows Operating Systems for Server Administrator and Server Administrator Web Server

The following table lists the supported Microsoft Windows operating systems for the Server Administrator and Server Administrator web server:

Table 7. Supported Microsoft Windows Server Operating Systems for Server Administrator and Server Administrator web server.

| Microsoft Windows Server | Service Pack | Server Administrator | Server Administrator Web Server |
|--------------------------|--------------|----------------------|---------------------------------|
| Windows Server 2019 | N/A | X | X |

Supported Linux Operating Systems for Server Administrator and Server Administrator Web Server

The following table lists the supported Linux operating systems for the Server Administrator.

Table 8. Supported Linux Operating Systems for Server Administrator

| Supported Linux Operating Systems | Server Administrator | Server Administrator Web Server |
|-----------------------------------|----------------------|---------------------------------|
| Red Hat Enterprise Linux 8.0 | X | X |
| Red Hat Enterprise Linux 7.6 | X | X |

Supported Virtualization Operating Systems for Server Administrator and Server Administrator Web Server

The following table lists the supported Virtualization Operating Systems for the Server Administrator and Server Administrator web server:

Table 9. Supported VMware operating systems on Physical System

| VMware | Server Administrator | Server Administrator Web Server |
|----------------|----------------------|---------------------------------|
| vSphere 6.5 U3 | X | N/A |
| vSphere 6.7 U2 | X | N/A |
| vSphere 6.7 U3 | X | N/A |

Table 10. Supported Microsoft Operating Systems on Physical System

| Microsoft | Server Administrator | Server Administrator Web Server |
|--------------------------|----------------------|---------------------------------|
| Hyper-V for Windows 2019 | X | X |

NOTE:

- **Server Administrator** includes Server Instrumentation, Storage Management, Remote Access Components, and Remote Enablement.
- **Server Administrator Web Server** component cannot be installed on Dell EMC systems running the VMware ESXi operating system.

Supported Operating Systems for Server Administrator Web Server on your Managed System Servers

For information on supported operating systems on managed systems, see [Supported OpenManage Systems Management Software](#).

Supported OpenManage Systems Management Consoles

OpenManage systems management consoles provide the necessary tools for remote or one-to-many group system management. These tools also consolidate the management applications used on management workstations.

OpenManage Systems Management Consoles include:

- [OpenManage Mobile](#)
- [OpenManage Enterprise Power Manager](#)
- [OpenManage Server Administrator](#)

OpenManage Mobile v3.2

OpenManage Mobile is a systems management application that enables you to monitor your datacenter from an Android or an iOS mobile device. OpenManage Mobile enables you to add one or more OpenManage Essentials consoles or later and/or Integrated Dell Remote Access Controllers (iDRACs) 7 or later and/or OpenManage Enterprise consoles and/or Chassis. OpenManage Mobile provides OpenManage Essentials and OpenManage Enterprise alerts to your mobile device and enables you to troubleshoot your hardware in case of emergencies. In addition, OpenManage Mobile allows you to view the health of your data center and perform basic tasks such as power control functions.

Dell EMC OpenManage Enterprise Power Manager v1.0

Dell EMC OpenManage Enterprise Power Manager is an extension to Dell EMC OpenManage Enterprise (OME) console and uses fine-grained instrumentation to provide increased visibility over power consumption, anomalies, and utilization. Also, Power Manager alerts and reports about power and thermal events with servers, chassis, and custom groups consisting of servers and chassis. This enables increased control, faster response times, greater accuracy, and broader decision-making intelligence than would otherwise be possible.


When used with PowerEdge servers, or modular systems with an iDRAC Enterprise license, or supported chassis, and OpenManage Enterprise Advanced license, Power Manager leverages information from OME console for platform-level power reporting. Power Manager then communicates with Integrated Dell Remote Access Controller (iDRAC) or Chassis Management Controller (CMC) on each managed server to provide power-management data, and execution of control policy—making it easy for Administrators to identify areas to gain efficiencies and cut wasteful costs.

Supported web browsers for In-band management and monitoring

The list of supported web browsers for OpenManage 9.3.1 Systems Management software on systems running supported Microsoft Windows, Red Hat Enterprise Linux (RHEL).

Table 11. Supported web browsers running supported Microsoft Windows, Red Hat Enterprise Linux.

| Operating System | Internet Explorer (64-bit) | Microsoft Edge | Mozilla Firefox | Google Chrome | Safari |
|---------------------|-------------------------------------|----------------|-----------------|---------------|--------|
| | 11 | | 67 | 75 | 12 |
| Windows Server 2019 | X | X | X | X | |
| RHEL 8.0 | Native Mozilla Firefox Web Browsers | | | | |
| RHEL 7.6 | Native Mozilla Firefox Web Browsers | | | | |

 **NOTE:** For the latest information, see the *Release Notes* for the specific product available at www.dell.com/OpenManageManuals. Select the OpenManage release version and then select the appropriate product to view the *Release Notes*.

Out-of-band server management and monitoring

Out-of-band server management is the process of remotely managing and monitoring servers using Integrated Dell Remote Access Controller (iDRAC) with Lifecycle Controller.

Topics:

- [Supported Integrated Dell Remote Access Controllers and solutions](#)
- [iDRAC Service Module 3.4.1](#)
- [Supported Remote Access Controllers and Solutions for Blade, Rack, and Tower Servers](#)
- [Lifecycle Controller—Supported Dell EMC Systems and Operating Systems](#)
- [Supported web browsers for Out-of-Band management and monitoring](#)

Supported Integrated Dell Remote Access Controllers and solutions

The PowerEdge embedded server management solution, Integrated Dell Remote Access Controller (iDRAC) with Lifecycle Controller, helps IT administrators to speed up the essential management tasks, it increases the availability of your servers, and reduces your IT operational expenses.

With powerful, easy-to-use, remote management and configuration options, iDRAC with Lifecycle Controller alerts IT administrators when an issue occurs, enables streamlined local and remote server management, and reduces or eliminates the need for administrators to physically visit the server even if the server is not operational.

iDRAC includes:

- Graphical User Interface(GUI), Command-Line Interface(CLI), and WSMAN
- Server instrumentation
- OS Integration
- Manage storage devices

Overview

All versions of iDRAC9 – Basic, Express, and Enterprise – ship from the factory with a default static IP address, this is a preferred and a known method. However, Dell EMC also offers two options to better fit into a customer's existing environment. **Auto-discovery** or **DHCP** can be set from the factory to enable you to access iDRAC and remotely configure your server.

iDRAC9 Management Traffic – Dedicated NIC or Shared LOM

For certain yx4x generation of PowerEdge servers, you have the option to choose the network interface they wish to route iDRAC traffic – either the default **Dedicated NIC** for the iDRAC itself or through the **Shared LOM** that is also used by the server. Dell EMC recommends placing the iDRAC's on a separate management network for best iDRAC security. However, you can also route iDRAC management traffic over the shared LOM. Select the **shared LOM** option if you may want to ensure that this feature is enabled at the Dell EMC factory. There is no additional charge to enable shared LOM at the time of order. The servers which support the option of selecting shared LOM for iDRAC management traffic are:

- R740
- R740xd
- T640
- R940
- C6420

iDRAC also logs event data and the most recent crash screen (for systems running the Microsoft Windows operating system only) to help diagnose the probable cause of a system crash.

For more information, see the *Dell Remote Access Controller User's Guide* or the *Integrated Dell Remote Access Controller User's Guide* at www.dell.com/Support/Home.

Table below “Remote Access Controllers and Solutions for Blade Servers” and Table “For Rack and Tower Servers” list the following:

- Supported Remote Access Controller versions and firmware for iDRAC
- Supported Chassis Management Controller versions and firmware
- Supported BMC firmware versions
- Supported IPMI protocol versions

iDRAC Service Module 3.4.1

The Integrated Dell Remote Access Controller(iDRAC) Service Module is a lightweight optional software application that can be installed on yx3x servers or later with minimum Firmware version of 3.36.36.36 for iDRAC9 on yx4x servers and 3.40.40.40 for iDRAC 9 on yx5x servers. The iDRAC Service Module complements iDRAC interfaces – Graphical User Interface (GUI), RACADM CLI and Web Service Management (WSMan) with additional monitoring data. You can configure the features on the supported operating system depending on the features to be installed and the unique integration needs in a work environment.

The iDRAC Service Module architecture uses IP socket communication and provides additional Server Management data (OS/device driver) to iDRAC and presents one-to-many consoles with access to Systems Management data through OS standard interfaces.

Supported Remote Access Controllers and Solutions for Blade, Rack, and Tower Servers

The following table lists the supported Remote Access Controllers and Solutions for Blade, Rack, and Tower servers:

Table 12. Supported Remote Access Controllers and Solutions for Blade, Rack, and Tower Servers

| Dell EMC devices | DRACs | | MSM/CMC Firmware | | | | BMC | Supported IPMI |
|------------------|------------|---------------------------|------------------|----------|---------|------------|-----|----------------|
| | iDRAC Type | Supported DRAC FW version | M1000e CMC | VRTX CMC | FX2 CMC | MX7000 MSM | | |
| R6515 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R7515 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R240 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R340 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| T140 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| T340 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R740xd2 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| MX740c | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | 1.00.01 | N/A | 2.0 |
| MX840c | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | 1.00.01 | N/A | 2.0 |
| R840 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R940xa | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R7425 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R7415 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R6415 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| M640-VRTX | iDRAC9 | 3.40.40.40 | N/A | 3.20 | N/A | N/A | N/A | 2.0 |
| M640 | iDRAC9 | 3.40.40.40 | 6.20 | N/A | N/A | N/A | N/A | 2.0 |
| FC640 | iDRAC9 | 3.40.40.40 | N/A | N/A | 2.20 | N/A | N/A | 2.0 |
| R540 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R440 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| T640 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |

| Dell EMC devices | DRACs | | MSM/CMC Firmware | | | | BMC | Supported IPMI |
|------------------|------------|---------------------------|------------------|----------|---------|------------|-----|----------------|
| | iDRAC Type | Supported DRAC FW version | M1000e CMC | VRTX CMC | FX2 CMC | MX7000 MSM | | |
| T440 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R740xd | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R940 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R740 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R640 | iDRAC9 | 3.40.40.40 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| FC 430 | iDRAC8 | 2.60.60.60 | N/A | N/A | 2.20 | N/A | N/A | 2.0 |
| FC 630 | iDRAC8 | 2.60.60.60 | N/A | N/A | 2.20 | N/A | N/A | 2.0 |
| FC 830 | iDRAC8 | 2.60.60.60 | N/A | N/A | 2.20 | N/A | N/A | 2.0 |
| FM 120 | iDRAC8 | 2.60.60.60 | N/A | N/A | 2.20 | N/A | N/A | 2.0 |
| M430 | iDRAC8 | 2.60.60.60 | 6.20 | N/A | N/A | N/A | N/A | 2.0 |
| M630 | iDRAC8 | 2.60.60.60 | 6.20 | N/A | N/A | N/A | N/A | 2.0 |
| M630-VRTX | iDRAC8 | 2.60.60.60 | N/A | 3.20 | N/A | N/A | N/A | 2.0 |
| M830 | iDRAC8 | 2.60.60.60 | 6.20 | N/A | N/A | N/A | N/A | 2.0 |
| M830-VRTX | iDRAC8 | 2.60.60.60 | N/A | 3.20 | N/A | N/A | N/A | 2.0 |
| R230 | iDRAC8 | 2.60.60.60 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R330 | iDRAC8 | 2.60.60.60 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R430 | iDRAC8 | 2.60.60.60 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R530 | iDRAC8 | 2.60.60.60 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R630 | iDRAC8 | 2.60.60.60 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R730 | iDRAC8 | 2.60.60.60 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R730 XD | iDRAC8 | 2.60.60.60 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R830 | iDRAC8 | 2.60.60.60 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| R930 | iDRAC8 | 2.60.60.60 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| T130 | iDRAC8 | 2.60.60.60 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| T330 | iDRAC8 | 2.60.60.60 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| T430 | iDRAC8 | 2.60.60.60 | N/A | N/A | N/A | N/A | N/A | 2.0 |
| T630 | iDRAC8 | 2.60.60.60 | N/A | N/A | N/A | N/A | N/A | 2.0 |

Lifecycle Controller—Supported Dell EMC Systems and Operating Systems

The Dell EMC Lifecycle Controller provides advanced embedded systems management and is delivered as part of integrated Dell Remote Access Controller (iDRAC) and embedded Unified Extensible Firmware Interface (UEFI) applications in the yx4x generation of PowerEdge servers.

The Lifecycle Controller software components are built on iDRAC and UEFI system firmware. Lifecycle Controller firmware can access and manage the hardware, including component and sub- system management that is beyond the traditional Baseboard Management Controller (BMC) capabilities. The UEFI environment provides the local console interface and the infrastructure for locally managed system components. It simplifies the end-to-end server lifecycle management.

On the yx4xgeneration of PowerEdge servers, Lifecycle Controller is known as Lifecycle Controller 3 (includes GUI and Remote Services). The functionalities available are based on the generation of the server and the variant of Lifecycle Controller:

- **Lifecycle Controller GUI 3.40.40.40** —Lifecycle Controller GUI supports systems management tasks such as deploy, configure, update, maintain, and diagnose in a one-to-one method.
- **Lifecycle Controller-Remote Services 3.40.40.40** —Remote Services (WSMan) simplifies end-to-end server lifecycle management using the one-to-many method. It interfaces for remote deployment that is integrated with OpenManage Essentials and partner consoles.

For more information, see the Lifecycle Controller documentation available at www.dell.com/Support/Home.

Supported Dell EMC Systems and Windows Operating Systems for Lifecycle Controller 3.40.40.40

See [Supported OpenManage Systems Management Software on Windows Operating Systems](#) for a list of all the Dell EMC systems and Microsoft Operating systems that support Lifecycle Controller.

NOTE: Lifecycle Controller is not supported on Windows Storage Server operating systems.

Supported Dell EMC Systems and Linux Operating Systems for Lifecycle Controller 3.40.40.40

See [Supported OpenManage Systems Management Software on Linux Operating Systems](#) for a list of all the Dell EMC systems and Microsoft Operating systems that support Lifecycle Controller.

Supported Dell EMC Systems and Virtualization Operating Systems for Lifecycle Controller 3.40.40.40

See [Supported OpenManage Systems Management Software on Virtualization Operating Systems](#) for a list of all the Dell EMC systems and Microsoft Operating systems that support Lifecycle Controller.

Supported web browsers for Out-of-Band management and monitoring

The list of supported web browsers for iDRAC9 on systems running supported Microsoft Windows and Red Hat enterprise Linux.

Table 13. Supported web browsers for iDRAC9 on systems running supported Microsoft Windows, Red Hat enterprise Linux.

| Operating System | Internet Explorer (64-bit) | Microsoft Edge | Mozilla Firefox | Google Chrome | Safari |
|---------------------|-------------------------------------|----------------|-----------------|---------------|--------|
| | 11 | | 67 | 75 | 12 |
| Windows Server 2019 | X | | X | | |
| RHEL 7.6 | Native Mozilla Firefox Web Browsers | | | | |
| RHEL 8.0 | Native Mozilla Firefox Web Browsers | | | | |

Supported OpenManage Change Management Software

OpenManage change management software is a set of tools that enables you to update Dell EMC systems. It is also an efficient way to manage hardware, software, and operating system updates.

OpenManage change management software consists of:

- Dell EMC Update Packages
- Dell EMC Server Update Utility
- FTP Catalog
- Dell EMC System Update
- **Dell EMC Update Packages** - A Dell Update Package (DUP) is a self-contained executable in a standard package format. Each DUP is designed to update a single software component on a Dell EMC system.

DUPs enable administrators to update a wide range of system components simultaneously and apply scripts to similar sets of Dell EMC systems to bring system software components up to the same version levels.

For more information about DUPs, see the *Dell Update Packages User's Guide* available on the Dell EMC Support website at www.dell.com/Support/Home.

- **FTP Catalog** With Repository Manager, you can use the FTP catalog to identify and gather updates relevant to the system in your Data Center. The FTP catalog contain updates for yx3x, yx4x and yx5x systems.
- **Dell System Update** - Dell System Update (DSU) is an improved version of Online repository to distribute Dell updates for Linux and Windows systems. DSU distributes BIOS and Firmware updates for different servers. DSU provides a better customer experience by getting the latest updates to your system.

NOTE: The list provides the details of the supported platforms against the operating systems for other change management products that are aligned with the latest OpenManage release. For the latest list of operating systems and platforms that are supported by DSU, see [Dell System Update](#).

Topics:

- [Supported Change Management Software on Microsoft Windows Operating Systems](#)
- [Supported Change Management Software on Linux Operating Systems](#)
- [Supported Change Management Software on Virtualization Operating Systems](#)

Supported Change Management Software on Microsoft Windows Operating Systems

A 'D' in the intersection of the operating system and the Dell EMC system columns indicates support for DUPs.

A 'S' in the intersection of the operating system and the Dell EMC system columns indicates support for SUU.

A 'V' in the intersection of the operating system and the Dell EMC system columns indicates support only in a virtual machine and not as a host operating system.

NOTE: SUU is used for server updates and may not work on newly released Dell EMC systems that do not receive any server updates.

NOTE: DSS1500, DSS1510, and DSS2500 are supported only by SUU of Change management and not supported by OM.

The following table lists the supported OpenManage 9.3.1 change management software on systems running supported Microsoft Windows operating systems.

Table 14. Supported OpenManage Change Management Software on Systems Running Supported Microsoft Windows Server and Microsoft Windows Small Business Server Operating Systems

| Dell EMC Systems | Windows Server 2019 |
|--------------------------------------|---------------------|
| yx5x generation of PowerEdge servers | D, S |

Supported Change Management Software on Linux Operating Systems

A '**D**' in the intersection of the operating system and the Dell EMC system columns indicates support for DUPs. The Dell EMC Update Package (DUP) is a self-contained executable in a standard package format that updates an application or component firmware on a server. Using Dell Repository Manager along with other tools helps to keep the managed systems up-to-date.

A '**S**' in the intersection of the operating system and the Dell EMC system columns indicates support for SUU. The Dell EMC Server Update Utility (SUU) helps to identify and apply updates to a managed system. Use this utility to update the managed system or to view the updates available for the supported systems.

A '**L**' in the intersection of the operating system and the Dell EMC system columns indicates support for Dell EMC System Update.

NOTE: SUU is used for server updates and may not work on newly released Dell EMC systems that do not receive any server updates.

The following table lists the supported OpenManage 9.3.1 change management software on systems running supported Linux operating systems:

Table 15. Supported OpenManage Change Management Software on Systems Running Supported Red Hat Enterprise Linux Operating Systems.

| Dell EMC Systems | RHEL 8.0 | RHEL 7.6 |
|--------------------------------------|----------|----------|
| yx5x generation of PowerEdge servers | D, S, L | D, S, L |
| yx4x generation of PowerEdge servers | D, S, L | |
| yx3x generation of PowerEdge servers | D, S, L | |

Supported Change Management Software on Virtualization Operating Systems

A '**D**' in the intersection of the operating system and the Dell EMC system columns indicates support for DUPs.

A '**S**' in the intersection of the operating system and the Dell EMC system columns indicates support for SUU.

An asterisk (*) indicates the Dell EMC systems that do not support OpenManage software.

NOTE: You can install OMSA using VIB file on Embedded VMware (ESXi) operating systems.

NOTE: DUPs are not supported on ESXi operating systems.

The following table lists the supported OpenManage 9.3.1 change management software on systems running supported Virtualization operating systems.

Table 16. Supported OpenManage Change Management Software on Systems Running Supported Virtualization Operating Systems for VMware

| Dell EMC Systems | VMware | | |
|--------------------------------------|----------------|----------------|----------------|
| | vSphere 6.5 U3 | vSphere 6.7 U2 | vSphere 6.7 U3 |
| yx5x generation of PowerEdge servers | * | * | * |
| yx4x generation of PowerEdge servers | * | * | * |

| Dell EMC Systems | VMware | | |
|--------------------------------------|----------------|----------------|----------------|
| | vSphere 6.5 U3 | vSphere 6.7 U2 | vSphere 6.7 U3 |
| yx3x generation of PowerEdge servers | * | * | * |

OpenManage Systems Management tools for in-band and out-of-band access

OpenManage Systems Management tools or utilities provide the necessary tools for remote or one-to-many group system management. These tools also consolidate the management applications used on management workstations.

- Dell Deployment Toolkit
- DRAC tools - RACADM
- IPMI Tool in-Band
- BMC Management Utility and IPMI Tool Out-of-Band

Topics:

- [iDRAC Tools - RACADM](#)
- [Supported Linux Operating Systems for IPMITool In-Band](#)
- [Supported Microsoft Windows Operating Systems for IPMITool In-Band](#)
- [Supported Microsoft Windows Operating Systems for IPMITool Out-of-Band](#)
- [Supported Linux Operating Systems for IPMITool Out-of-Band](#)

iDRAC Tools - RACADM

RACADM is a command-line utility that enables administrators to configure and replicate settings across multiple Dell remote access controllers (iDRACs). The RACADM utility supports operations by using command-line parameters, switches, and a configuration file that contains all data that is required to configure a iDRAC.

 **NOTE:** This release of OpenManage Software does not support VMCLI and iVMCLI tools.

Supported Microsoft Windows Operating Systems for the RACADM Utility

The following table lists the supported Microsoft Windows operating systems for the RACADM utility:

An 'X' in the operating system column indicates support for the RACADM utility.

Table 17. Supported Microsoft Windows Server Operating Systems for RACADM

| RACADM utility | Microsoft Windows Server 2019 |
|----------------|-------------------------------|
| Service Pack | NA |
| Remote RACADM | X |
| Local RACADM | X |

Supported Linux Operating Systems for the RACADM Utility

The following table lists the supported Linux operating systems for the RACADM utility.

An 'X' in the operating system column indicates support for the RACADM utility.

Table 18. Supported Linux Operating Systems for RACADM

| RACADM utility | RHEL 7 | RHEL 8 |
|-----------------------|---------------|---------------|
| Remote RACADM | X | X |
| Local RACADM | X | X |

Supported Linux Operating Systems for IPMITool In-Band

The following table lists the supported Linux operating systems for the IPMITool In-Band:

An 'X' in the operating system column indicates IPMITool in-band support.

Table 19. Supported Linux Operating Systems for IPMITool In-Band

| Supported Linux Operating Systems | IPMITool In-Band |
|--|-------------------------|
| RHEL 8 | X |
| RHEL 7.6 | X |

Supported Microsoft Windows Operating Systems for IPMITool In-Band

The following table lists the supported Microsoft Windows operating systems for the IPMI Tool:

An 'X' in the operating system column indicates IPMITool support.

Table 20. Supported Microsoft Windows Server Operating Systems for IPMITool

| Supported Microsoft Windows Server Operating System | IPMITool |
|--|-----------------|
| Windows Server 2019 | X |

Supported Microsoft Windows Operating Systems for IPMITool Out-of-Band

The following table lists the supported Microsoft Windows operating systems for IPMI Tool Out of Band.

An 'X' in the operating system column indicates IPMI Tool out-of-band support.

Table 21. Supported Microsoft Windows Server Operating Systems for BMU and IPMI Tool Out-of- Band

| Supported Microsoft Windows Server Operating System | IPMITool Out-of- Band |
|--|------------------------------|
| Windows Server 2019 | X |

Supported Linux Operating Systems for IPMITool Out-of-Band

The following table lists the supported Linux operating systems for the IPMITool Out-of-Band:

An 'X' in the operating system column indicates IPMITool.

Table 22. Supported Linux Operating Systems for IPMITool

| Supported Linux Operating Systems | IPMITool Out-of-Band |
|-----------------------------------|----------------------|
| RHEL 8 | X |
| RHEL 7.6 | X |

Network Interface Controllers and Supported Operating Systems

The drivers required for a Network Interface Card (NIC) depend on the operating system that is installed on your system.

The following table lists the NIC manufacturers and drivers version that is required for the supported operating systems in OpenManage 9.3.1:

Table 23. NIC Manufacturers and Drivers Required for Supported Microsoft Windows Operating Systems

| NIC Product Name | Microsoft Windows Server 2019 Family |
|---|--------------------------------------|
| Broadcom BCM5720 1Gbps OCP3 Mezz | 21.40.2 |
| Broadcom BCM57416 10G BT Dual Port OCP3 Mezz | 21.40.25.31 |
| Broadcom BCM57414 25G SFP Dual Port OCP3 Mezz | 21.40.25.31 |
| Intel(R) Ethernet 10G 2P X710 OCP | 19.0.0 |
| Intel(R) Ethernet 1G 4P I350-t OCP | 19.0.0 |
| Mellanox ConnectX-5 Dual Port 25GbE SFP28 PCIe Adapter | 16.25.40.62 |
| Mellanox ConnectX-5 Dual Port 25GbE SFP28 PCIe Adapter | 16.25.40.62 |
| Mellanox ConnectX-5 Dual Port 25GbE SFP28 OCP 3.0 Adapter | 16.25.40.62 |
| QLogic 2x10GE QL41132HxRJ NIC (FH) | 35.00.00 |
| QLogic 2x10GE QL41132HxRJ NIC (LP) | 35.00.00 |
| QLogic 2x25GE QL41232HxCU NIC (FH) | 35.00.00 |
| QLogic 2x25GE QL41232HxCU NIC (LP) | 35.00.00 |

Table 24. NIC Manufacturers and Drivers Required for Supported Red Hat Enterprise Linux Operating Systems

| NIC Product Name | Red Hat Enterprise Linux 7.6 and 8.0 |
|---|--------------------------------------|
| Broadcom BCM5720 1Gbps OCP3 Mezz | 21.4.2 |
| Broadcom BCM57416 10G BT Dual Port OCP3 Mezz | 21.4.2 |
| Broadcom BCM57414 25G SFP Dual Port OCP3 Mezz | 21.4.2 |
| Intel(R) Ethernet 10G 2P X710 OCP | 19.0.0 |
| Intel(R) Ethernet 1G 4P I350-t OCP | 19.0.0 |
| Mellanox ConnectX-5 Dual Port 25GbE SFP28 PCIe Adapter | 16.25.40.62 |
| Mellanox ConnectX-5 Dual Port 25GbE SFP28 PCIe Adapter | 16.25.40.62 |
| Mellanox ConnectX-5 Dual Port 25GbE SFP28 OCP 3.0 Adapter | 16.25.40.62 |
| QLogic 2x10GE QL41132HxRJ NIC (FH) | 35.00.00.09 |
| QLogic 2x10GE QL41132HxRJ NIC (LP) | 35.00.00.09 |
| QLogic 2x25GE QL41232HxCU NIC (FH) | 35.00.00.09 |
| QLogic 2x25GE QL41232HxCU NIC (LP) | 35.00.00.09 |

RAID and non-RAID Controller Supported Servers, Operating Systems, Firmware, and Driver Versions

Starting with OpenManage Server Administrator version 5.0, only the enhanced Storage Management Service is supported. The Storage Management Service allows you to configure and manage your storage devices from within Server Administrator.

NOTE: The Storage Management Service mentioned in this guide refers to the enhanced Storage Management Service. Server Administrator no longer supports the basic Storage Management Service (also known as Array Manager).

Most of the systems management releases support management of RAID controllers in the form of PERC cards, and some systems management releases also support SATA controllers. System administrators responsible for monitoring the compatibility of their systems' storage devices need a clear matrix that shows the elements that are compatible with a particular storage controller. Each storage controller version in turn supports a specific array of elements, including:

- Version of the Storage Management Service
- Dell EMC system
- Firmware version number required for a particular controller
- Supported operating systems, where each operating system requires a specific driver

For more information on Storage Management Services see the *Dell Server Administrator Storage Management User's Guide* at www.dell.com/OpenManageManuals.

The following types of controllers are included in this section:

- The RAID controller card group contains the following controllers: PERC 6E, PERC 6i, SAS 6iR, PERC H200, PERC H310, PERC H330, PERC HBA H330, PERC H700, PERC H710 and H710P, PERC H730 and H730P, PERC H740 and H740P, PERC H800, PERC H810, PERC H830, PERC H840, PERC S110, PERC S130, PERC S140, PERC HBA 330MX, PERC HBA 330MMZ, PERC H730P MX, PERC H745P MX, FD33XS-PERC Single, FD33XD-PERC Dual, FD33XS-HBA 330 Single, FD33XD-HBA 330 Dual, SAS 6 Gbps HBA, SAS 12Gbps HBA, Internal Tape Adapter, and Dell PowerEdge PCIe Express Flash SSD.
- The RAID controller card group supports the following operating systems: Windows Server 2019, VMware ESXi 6.5 U3, VMware ESXi 6.7 U2, VMware ESXi 6.7 U3, Red Hat Enterprise Linux 7.6, and Red Hat Enterprise Linux 8.0.

NOTE: The supported devices for PowerEdge R6515 and PowerEdge R7515 are PERC H730 and PERC H730P, PERC H740 and PERC H740P, PERC S150, SAS12 Gbps, HBA330 PowerEdge PCIe Express Flash SSD. Refer platform supported operating system in earlier sections.

NOTE: The firmware and drivers listed in this section refer to the minimum supported version as of the publication date of this document. Later versions of the firmware and drivers may also be supported or required. For the most recent driver and firmware requirements, see www.dell.com/OpenManageManuals for the Storage Management Service.

Topics:

- [Linux Driver Included in RPM](#)
- [PERC 6E Adapter](#)
- [PERC 6i Adapter, Integrated, and Modular](#)
- [SAS 6iR int Modular](#)
- [SAS 6 iR Integrated and Adapter](#)
- [PERC H200 Adapter, Integrated, and Modular](#)
- [PERC H310 Adapter, Mini Blade, and Mini Monolithic](#)
- [PERC H330 Adapter, Mini Blade, and Mini Monolithic](#)
- [PERC HBA H330 Mini, Adapter](#)
- [PERC H700 Adapter, Integrated, and Modular](#)
- [PERC H710 and H710P Adapter, Mini Blade, and Mini Monolithic](#)
- [PERC H730 and H730P Adapter, Mini Blade, and Mini Monolithic](#)

- PERC H740 and H740P Adapter
- PERC H800 Adapter
- PERC H810 Adapter
- PERC H830 Adapter, Mini Monolithic
- PERC S110
- PERC S130
- PERC S140
- PERC HBA 330MX
- PERC HBA 330MMZ
- PERC H730P MX
- PERC H745P MX
- FD33XS-PERC Single
- FD33XD-PERC Dual
- FD33XS-HBA 330 Single
- FD33XD-HBA 330 Dual
- SAS 6 Gbps HBA
- SAS 12Gbps HBA
- Internal Tape Adapter
- PowerEdge PCIe Express Flash SSD

Linux Driver Included in RPM

The 1.1.4 Linux driver is included in RPM 2302 (Red Hat Package Manager 2302).

PERC 6E Adapter

The PERC 6/E Adapter supports the following PowerEdge systems: R200, R220, R300, R805, R900, R905, T300, T610, R410, R610, R710, T410, M610, M710, T710, T310, R310, R210, T110, R510, R810, R910, M910, R715, R815, R415, and R515.

The PERC 6/E Adapter supports the following Dell EMC Storage systems: MD1000 and MD1120.

The PERC 6/E Adapter supports six storage enclosures.

Table 25. PERC 6/E Adapter

| Storage Management Service supported elements | Version |
|---|------------|
| Storage Management Service Version | 6.3.0 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 6.3.3-0002 |

PERC 6i Adapter, Integrated, and Modular

The PERC 6/i Adapter supports the following PowerEdge systems: R410, R905, T300, and T605.

The PERC 6/i Integrated supports the following PowerEdge systems: T410, T710, T310, R310, R210, R220, T110, R510, R810, R910, M910, R715, R815, R415, R515, R805, R900, T610, R410, R610, R710, M610, and M710.

The PERC 6/i Modular supports the following PowerEdge systems: R610, R710, T610, R410, T410, M610, M710, T710, T310, R310, R210, R220, T110, R510, R810, R910, M910, R715, R815, R415, R515, R805, and R900.

Table 26. PERC 6/i Integrated and Adapter

| Storage Management Service supported elements | Version |
|---|------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 6.3.3-0002 |
| Red Hat Enterprise Linux 7.6 Driver | Native |

| Storage Management Service supported elements | Version |
|---|---------|
| Red Hat Enterprise Linux 8.0 Driver | Native |

SAS 6iR int Modular

The following tables list the elements that are supported by the SAS 6/iR Integrated and Adapter:

Table 27. SAS 6/iR Integrated and Adapter

| Storage Management Service supported elements | Version |
|---|-------------------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| SAS Firmware/BIOS Version | 00.25.47.00/06.22.03.00 |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |

SAS 6 iR Integrated and Adapter

The SAS 6/iR Integrated supports the following PowerEdge systems: R805, R900, M600, M605, M805, M905, T610, R410, R610, R710, M610, M710, R610, R710, T610, R410, T410, M610, M710, T710, T310, R310, R210, R220, T110, R510, R810, R910, M910, R715, R815, R415, and R515.

The SAS 6/iR Adapter supports the following PowerEdge systems: R200, R300, R410, T105, T300, R905, T100, and T605.

Table 28. SAS 6/iR Integrated and Adapter

| Storage Management Service supported elements | Version |
|---|-------------------------|
| Storage Management Service Version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| SAS Firmware/ BIOS Version | 00.25.47.00/06.22.03.00 |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |

PERC H200 Adapter, Integrated, and Modular

The PERC H200 Adapter supports the following Dell PowerEdge systems: T410, R210, R220, T110, T310, R310, T610, R410, and T710.

The PERC H200 Integrated supports the following Dell PowerEdge systems: R220, R710, R815, R715, R510, T610, R610, and T710.

The PERC H200 Modular supports the following Dell PowerEdge systems: M710 and M610.

Table 29. PERC H200 Modular controllers

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 07.03.06.00 |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |

PERC H310 Adapter, Mini Blade, and Mini Monolithic

The PERC H310 Adapter, Mini Blade, and Mini Monolithic support the following Dell PowerEdge systems: R620, R720, R720XD, M520, M620, R820, R220, R320, R420, R520, T320, T420 and T620.

Table 30. PERC H310 Adapter, Mini Blade, and Mini Monolithic controllers

| Storage Management Service supported elements | Version |
|---|--------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 20.13.3-0001 |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

PERC H330 Adapter, Mini Blade, and Mini Monolithic

The following tables list the other elements supported by the PERC H330 Adapter, Mini Blade, and Mini Monolithic controllers.

Table 31. PERC H330 Adapter, Mini Blade, and Mini Monolithic controllers

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 25.5.5.000X |
| Windows Server 2019 Driver | 6.604.06.00 |

PERC HBA H330 Mini, Adapter

The following tables list the other elements supported by the PERC HBA 330 Mini, Adapter controller.

Table 32. PERC HBA 330 Mini, Adapter controller

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 15.17.09.06 |
| Windows Server 2019 Driver | 2.51.21.2 |

PERC H700 Adapter, Integrated, and Modular

The PERC H700 Adapter supports the following PowerEdge systems: R220, R310, R410, R320, R420, R520, T310, T320, T410 and T420.

The PERC H700 Adapter supports the following PowerVault system: PowerVault NX300.

The PERC H700 Integrated supports the following PowerEdge systems: R710, R815, R715, R510, T610, R610, T710, R410, T410, M610, M710, T710, T310, R310, R210, R220, T110, R810, R910, M910, R415, and R515.

The PERC H700 Modular supports the following PowerEdge systems: M610 and M710.

The following tables list the other elements supported by the PERC H700 Integrated and Adapter.

Table 33. Dell OpenManage Supported Elements: PERC H700 Adapter, Integrated, and Modular

| Storage Management Service supported elements | Version | |
|---|--------------------------------|-----------------------------|
| Storage Management Service Version | 6.0.1 | |
| Server Administrator Version | N/A | |
| PERC Firmware Version | Integrated 12.10.7-0001 | Modular 12.10.6-0001 |
| Windows Server 2019 Driver | Native | |
| Red Hat Enterprise Linux 7.6 | Native | |
| Red Hat Enterprise Linux 8.0 | Native | |

PERC H710 and H710P Adapter, Mini Blade, and Mini Monolithic

The PERC H710 Adapter, Mini Blade, and Mini Monolithic support the following Dell PowerEdge systems: R620, R720, R720XD, M520, M620, R220, R320, R420, R520, T320, T420 and T620.

Table 34. PERC H710 Adapter, Mini Blade, and Mini Monolithic controllers

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | N/A |
| PERC Firmware Version | 21.3.5-0002 |
| Red Hat Enterprise Linux 7.6 | Native |
| Red Hat Enterprise Linux 8.0 | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

PERC H730 and H730P Adapter, Mini Blade, and Mini Monolithic

The following tables list the other elements supported by the PERC H730/H730P Adapter, Mini Blade, and Mini Monolithic controllers.

Table 35. PERC H730/H730P Adapter, Mini Blade, and Mini Monolithic controllers

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 25.5.5.000X |
| Windows Server 2019 Driver | 6.604.06.00 |

PERC H740 and H740P Adapter

The following tables list the other elements supported by the PERC H740/H740P controller.

Table 36. PERC H740/H740P controller

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 50.5.0-2819 |
| Windows Server 2019 Driver | 7.703.06.00 |

PERC H800 Adapter

The PERC H800 Adapter supports the following PowerEdge systems: R220, R320, R420, R520, R710, R815, T410, R715, R210, R510, T310, R310, T320, T420, T610, R610, R410, and T710.

The PERC H800 Adapter supports the following Storage systems: MD1200 and MD1220.

The PERC H800 Adapter supports eight storage devices.

The following tables list the other elements supported by the PERC H800 Adapter.

Table 37. PERC H800 Adapter

| Storage Management Service supported elements | Version |
|---|--------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | N/A |
| PERC Firmware Version | 12.10.7-0001 |
| Red Hat Enterprise Linux 7.6 | Native |
| Red Hat Enterprise Linux 8.0 | Native |

PERC H810 Adapter

The PERC H810 Adapter supports the following PowerEdge systems: R620, R720, R720XD, R820, M620, R220, R320, R420, R520, T320, T420 and T620.

The following tables list the other elements supported by the PERC H810 Adapter controller.

Table 38. PERC H810 Adapter controller

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | N/A |
| PERC Firmware Version | 21.3.5-0002 |
| Red Hat Enterprise Linux 7.6 | Native |
| Red Hat Enterprise Linux 8.0 | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

PERC H830 Adapter, Mini Monolithic

The PERC H830 Adapter, Mini Monolithic support the following PowerEdge systems: R430, R530, R630, R730, R7910, R730 XD, T430, T630, M630, M830, FC430, FC630, FC830 and C4130.

The following tables list the other elements supported by the PERC H830 Adapter, Mini Monolithic controllers.

Table 39. PERC H830 Adapter, Mini Monolithic controllers

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 25.5.5.000X |
| Windows Server 2019 Driver | 6.604.06.00 |

PERC S110

The PERC S110 controller supports the following PowerEdge systems: M520, M620, R220, R320, R420, R520, R620, R720, T320, T420, and T620

The following tables list the other elements supported by the PERC S110 controller.

Table 40. Dell OpenManage Supported Elements: PERC S110

| Storage Management Service supported elements | Version |
|---|---------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | N/A |
| PERC Firmware Version | 3.0.0.0139 |
| Red Hat Enterprise Linux 7.6 | Not Supported |
| Red Hat Enterprise Linux 8.0 | Not Supported |
| VMware ESXi 6.5 U3 Driver | Not Supported |
| VMware ESXi 6.7 U2 Driver | Not Supported |
| VMware ESXi 6.7 U3 Driver | Not Supported |

PERC S130

The following tables list the other elements supported by the PERC S130 controller.

Table 41. Dell OpenManage Supported Elements: PERC S130

| Storage Management Service supported elements | Version |
|---|------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | N/A |
| PERC Firmware Version | 4.2.0-0009 |
| Windows Server 2019 Driver | 4.3.0-0003 |

PERC S140

The following tables list the other elements supported by the PERC S140 controller.

Table 42. OpenManage Supported Elements: PERC S140

| Storage Management Service supported elements | Version |
|---|------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 5.2.0-0006 |
| Windows Server 2019 Driver | 5.2.0-0006 |

PERC HBA 330MX

The following tables list the other elements supported by the PERC HBA 330MX controller.

Table 43. PERC HBA 330MX controller

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.2 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 15.17.09.08 |
| Windows Server 2019 Driver | 2.51.21.2 |

PERC HBA 330MMZ

The following tables list the other elements supported by the PERC HBA 330MMZ controller.

Table 44. PERC HBA 330MMZ controller

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 15.17.09.08 |
| Windows Server 2019 Driver | 2.51.21.2 |

PERC H730P MX

The following tables list the other elements supported by the PERC H730P MX controller.

Table 45. PERC H730P MX controller

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 25.5.5.005 |
| Windows Server 2019 Driver | 6.604.06.00 |

PERC H745P MX

The following tables list the other elements supported by the PERC H745P MX controller.

Table 46. PERC H745P MX controller

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 50.5.0-2819 |
| Windows Server 2019 Driver | 7.703.06.00 |

FD33XS-PERC Single

The FD33XS-PERC Single controller supports the 13th generation of PowerEdge systems.

The following tables list the other elements supported by the FD33XS-PERC Single controller.

Table 47. FD33XS-PERC Single controller

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 25.5.5.000X |
| Windows Server 2019 Driver | 6.604.06.00 |

FD33XD-PERC Dual

The FD33XD-PERC Dual controller supports the 14th generation of PowerEdge systems.

The following tables list the other elements supported by the FD33XD-PERC Dual controller.

Table 48. FD33XD-PERC Dual controller

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 25.5.5.000X |
| Windows Server 2019 Driver | 6.604.06.00 |

FD33XS-HBA 330 Single

The following tables list the other elements supported by the FD33XS-HBA 330 Single controller.

Table 49. FD33XS-HBA 330 Single controller

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| Firmware Version | 15.17.09.07 |
| Windows Server 2019 Driver | 2.51.21.2 |

FD33XD-HBA 330 Dual

The following tables list the other elements supported by the FD33XD-HBA 330 Dual controller.

Table 50. FD33XD-HBA 330 Dual controller

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| Firmware Version | 15.17.09.07 |
| Windows Server 2019 Driver | 2.51.21.2 |

SAS 6 Gbps HBA

The SAS 6 Gbps HBA supports the following PowerEdge systems: R805, R900, M600, M605, M805, M905, T610, R410, R610, R710, M610, M710, R200, R220, R300, R410, T105, T300, R905, T100, and T605.

The following tables list the other elements supported by the SAS 6 Gbps HBA.

Table 51. SAS 6 Gbps HBA

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | N/A |
| SAS Firmware/ BIOS Version | 07.03.06.00 |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

SAS 12Gbps HBA

The SAS 12Gbps HBA supports the Storage MD1400 and MD1420 Enclosures.

The following tables list the other elements supported by the SAS 12Gbps HBA.

Table 52. Storage Management Service supported elements: SAS 12Gbps HBA

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 15.17.09.06 |
| Windows Server 2019 Driver | 2.51.21.2 |

Internal Tape Adapter

The Internal Tape Adapter supports the following PowerEdge systems: T620, T320, and T420.

The following tables list the other elements supported by the Internal Tape Adapter.

The Internal Tape Adapter supports the following Tape Drives: LTO3-080 for IBM ULTRIUM-HH3, LTO4-120 for IBM ULTRIUM-HH4, LTO5-140 for IBM ULTRIUM-HH5 and LTO6-200 for IBM ULTRIUM-HH6.

Table 53. Internal Tape Adapter controllers

| Storage Management Service supported elements | Version |
|---|-------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | N/A |
| PERC Firmware Version | 07.03.06.00 |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

PowerEdge PCIe Express Flash SSD

The following tables list the other elements supported by the PowerEdge PCIe Express Flash solid-state storage devices.

Table 54. PowerEdge PCIe Express Flash SSD

| Storage Management Service supported elements | Version |
|---|---------------|
| Storage Management Service version | 6.0.1 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | B1442808 |
| Windows Server 2019 Driver | Not Supported |

XS1715 PCIe SSD

Table 55. PowerEdge XS1715 PCIe SSD

| Storage Management Service supported elements | Version |
|---|----------|
| Storage Management Service version | 6.3.0 |
| Server Administrator Version | N/A |
| PERC Firmware Version | IPM0LD3Q |
| Windows Server 2019 Driver | Native |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

SM1715 PCIe SSD

Table 56. PowerEdge SM1715 PCIe SSD

| Storage Management Service supported elements | Version |
|---|---------|
| Storage Management Service version | 6.3.0 |
| Server Administrator Version | 9.3.1 |

| Storage Management Service supported elements | Version |
|---|----------|
| PERC Firmware Version | IPV48D3Q |
| Windows Server 2019 Driver | Native |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

PM1725 PCIe SSD

Table 57. PowerEdge PM1725 PCIe SSD

| Storage Management Service supported elements | Version |
|---|----------|
| Storage Management Service version | 6.3.0 |
| Server Administrator Version | N/A |
| PERC Firmware Version | KPYACD3Q |
| Windows Server 2019 Driver | Native |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

PM1725a PCIe SSD

Table 58. PowerEdge PM1725a PCIe SSD

| Storage Management Service supported elements | Version |
|---|---------|
| Storage Management Service version | 6.3.0 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 1.1.1 |
| Windows Server 2019 Driver | Native |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |
| Ubuntu 18.04.02 Driver | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

PM1725b PCIe SSD

Table 59. PowerEdge PM1725b PCIe SSD

| Storage Management Service supported elements | Version |
|---|---------|
| Storage Management Service version | 6.3.0 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 1.0.0 |
| Windows Server 2019 Driver | Native |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |
| Ubuntu 18.04.02 Driver | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

P4500 PCIe SSD

Table 60. PowerEdge P4500 PCIe SSD

| Storage Management Service supported elements | Version |
|---|----------|
| Storage Management Service version | 6.3.0 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | QDV1DP15 |
| Windows Server 2019 Driver | Native |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |
| Ubuntu 18.04.02 Driver | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

P4600 PCIe SSD

Table 61. PowerEdge P4600 PCIe SSD

| Storage Management Service supported elements | Version |
|---|----------|
| Storage Management Service version | 6.3.0 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | QDV1DP15 |
| Windows Server 2019 Driver | Native |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |

| Storage Management Service supported elements | Version |
|---|---------|
| Ubuntu 18.04.02 Driver | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

P4510 PCIe SSD

Table 62. PowerEdge P4510 PCIe SSD

| Storage Management Service supported elements | Version |
|---|----------|
| Storage Management Service version | 6.3.0 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | VDV1DP20 |
| Windows Server 2019 Driver | Native |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |
| Ubuntu 18.04.02 Driver | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

P4610 PCIe SSD

Table 63. PowerEdge P4610 PCIe SSD

| Storage Management Service supported elements | Version |
|---|----------|
| Storage Management Service version | 6.3.0 |
| Server Administrator Version | 9.3.2 |
| PERC Firmware Version | VDV1DP20 |
| Windows Server 2019 Driver | Native |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |
| Ubuntu 18.04.02 Driver | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

P4800x PCIe SSD

Table 64. PowerEdge P4800x PCIe SSD

| Storage Management Service supported elements | Version |
|---|----------|
| Storage Management Service version | 6.3.0 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | E201DB3D |
| Windows Server 2019 Driver | Native |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |
| Ubuntu 18.04.02 Driver | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |

Toshiba CD5 PCIe SSD

Table 65. PowerEdge Toshiba CD5 PCIe SSD

| Storage Management Service supported elements | Version |
|---|---------|
| Storage Management Service version | 6.3.0 |
| Server Administrator Version | 9.3.1 |
| PERC Firmware Version | 0.1.10 |
| Windows Server 2019 Driver | Native |
| Red Hat Enterprise Linux 7.6 Driver | Native |
| Red Hat Enterprise Linux 8.0 Driver | Native |
| Ubuntu 18.04.02 Driver | Native |
| VMware ESXi 6.5 U3 Driver | Native |
| VMware ESXi 6.7 U2 Driver | Native |
| VMware ESXi 6.7 U3 Driver | Native |