Dell Systems Management - OpenManage Software Support Matrix

Version 8.1

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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.

Contents

1

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 is new in this release

This release adds support for the following:

- Support for the following operating systems:
  - Support for Red Hat Enterprise Linux 6.9
  - VMware ESXi 6.5
  - VMware ESXi 6.0 U3
  - **NOTE:** Citrix XenServer operating system support has been dropped for Server Administrator and Storage Management.
- Support for the following browsers:
  - Internet Explorer - 9, 10, 11
  - Microsoft Edge 25
  - Google Chrome - 58
  - Safari - 9.1
  - Mozilla Firefox - 52, 53

NOTE: For the list of supported operating systems and Dell servers, see the *Dell EMC OpenManage Software Support Matrix* in the required version of **OpenManage Software** at **dell.com/openmanagemanuals**.

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 support content from the Dell EMC support site

Access supporting content related to an array of systems management tools using direct links, going to the Dell EMC support site, or using a search engine.

- Direct links:

- For Dell EMC Enterprise Systems Management and Dell EMC Remote Enterprise Systems Management—https://www.dell.com/esmmanuals
- For Dell EMC Virtualization Solutions—https://www.dell.com/SoftwareManuals
- For Dell EMC OpenManage—https://www.dell.com/openmanagemanuals
- For iDRAC—https://www.dell.com/idracmanuals
- For Dell EMC OpenManage Connections Enterprise Systems Management—https://www.dell.com/OMConnectionsEnterpriseSystemsManagement
- For Dell EMC Serviceability Tools—https://www.dell.com/serviceabilitytools

- Dell EMC support site:
  1. Go to https://www.dell.com/support.
  2. Click **Browse all products**.
  3. From the **All products** page, click **Software**, and then click the required link.
  4. 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	yx2x servers	yx1x servers
R6515	R240	C4130	M420	M610
R7515	R340	C6320	M520	M610x
R6525	T140	C6320P	M620	M710
C6525	T340	FC 430	M820	M710 HD
R7525	R740xd2	FC 630	M820-VRTX	M910
	MX7000	FC 630	R220	M915
	MX5016s	FC 830	R320	R210
	MX740c	M630	R420	R210 II
	MX840c	M630-VRTX	R520	R310
	R7425	M830	R620	R410
	R7415	M830-VRTX	R720	R415
	R6415	R230	R720 XD	R510
	C6420	R330	R820	R515
	FC 640	R430	R920	R610
	M640	R530	T320	R710
	M640-VRTX	R630	T420	R715
	R440	R730	T620	R810
	R540	R730 XD		R815
	R540 XD	R7910		R910
	R640	R830		T110
	R740	R930		T110 II
	R740 XD	T130		T310
	R7920	T330		T410
	R940	T430		T610
	T440	T630		T710
	T640			DX2200
	C4140			DX6000
				NX200
				NX300
				NX3000
				NX3100

2

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 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 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 Systems Management Software on Systems Running Microsoft Windows Server and Microsoft Windows Small Business Server Operating Systems

Dell EMC devices	Windows Server 2012 R2	Windows Server 2016	Windows Server 2019
yx5x generation of PowerEdge servers		X	X
yx4x generation of PowerEdge servers		X	X

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

Dell EMC devices	Windows Server 2012 R2	Windows Server 2016	Windows Server 2019
yx3x generation of PowerEdge servers		X	X
yx2x generation of PowerEdge servers		X	X
yx1x generation of PowerEdge servers	X		

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

Dell EMC devices	Windows Server 2012 R2	Windows Server 2016	Windows Server 2019
yx5x generation of PowerEdge servers		X	X
yx4x generation of PowerEdge servers		X	X
yx3x generation of PowerEdge servers		X	X
yx2x generation of PowerEdge servers		X	X
yx1x generation of PowerEdge servers	X		

Supported OpenManage Systems Management Software on Linux Operating Systems

The following table lists the supported OpenManage 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 8.2 and RHEL 8.3	RHEL 7.8 and RHEL 7.9	SLES 15 SP2
yx5x generation of PowerEdge servers	X	X	X
yx4x generation of PowerEdge servers	X	X	X
yx3x generation of PowerEdge servers	X	X	X
yx2x generation of PowerEdge servers			
yx1x generation of PowerEdge servers			

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 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 7.0 and VMware vSphere 7.0 U1	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
yx2x generation of PowerEdge servers		
yx1x generation of PowerEdge servers		

OpenManage Server Administrator

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 9.5 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
Windows Server 2016	N/A	X	X
Windows 2012 R2	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 8.2 and Red Hat Enterprise Linux 8.3	X	X

Table 8. Supported Linux Operating Systems for Server Administrator (continued)

Supported Linux Operating Systems	Server Administrator	Server Administrator Web Server
Red Hat Enterprise Linux 7.8 and Red Hat Enterprise Linux 7.9	X	X
SLES 15 SP2	X	X
Ubuntu 20.04	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 7.0 and vSphere 7.0 U1	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 2012 R2	X	X
Hyper-V for Windows 2016	X	X
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

Dell OpenManage Essentials v2.0.1

The Dell OpenManage Essentials in the one-to-many Systems Management console providing Elemental Hardware Management that helps you maximize IT performance and uptime capabilities of Dell PowerEdge™ servers, EqualLogic™ and PowerVault™ storage, PowerConnect™ and Dell Force10 switches.

For more information, see the *Dell OpenManage Essentials Support Matrix* at **dell.com/support/manuals**.

OpenManage Mobile v3.3

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 v1.2

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 Microsoft Windows Operating Systems for Power Center v3.0

The following table lists the supported Microsoft Windows operating systems for the Power Center

Table 11. Supported Microsoft Windows Operating Systems for Power Center

	Microsoft Windows Server 2008 R2 (64-bit)	Microsoft Windows Server 2012 (64–bit)	Microsoft Windows Server 2012 R2 (64–bit)	Microsoft Windows 7.0	Microsoft Windows 8.0 Enterprise (64–bit)
Edition	**Standard, Enterprise, and Datacenter**	**Standard, Enterprise, and Datacenter**	**Standard, Enterprise, and Datacenter**		
Service Pack	SP1				
Power Center	X	X	X	X	X

Supported Linux Operating Systems For Power Center v3.0

The following table lists the supported Linux Operating Systems for the power center.

Table 12. Supported Linux Operating Systems

	Red Hat Linux 6.5 (64-bit)	Red Hat Linux 7.0 (64-bit)	SUSE Linux Enterprise Server 11 SP3 (32-bit and 64-bit)	SUSE Linux Enterprise Server 12 (64-bit)
Power Center	X	X	X	X

Supported web browsers for In-band management and monitoring

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

Table 13. 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		76	75	12
Windows Server 2019	X	X	X	X	
RHEL 8.2 and RHEL 8.3	Native Mozilla Firefox Web Browsers				
RHEL 7.8 and RHEL 7.9	Native Mozilla Firefox Web Browsers				
SLES 15 SP2	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*.

3

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

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

DRAC 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 3.5.1

The Integrated Dell Remote Access Controller(iDRAC) Service Module is a lightweight optional software application that can be installed on yx2x servers or later with minimum Firmware version of 4.00.00.00 for iDRAC 9 on yx4x and 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 14. 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		
R7525	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
R6515	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
R7515	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
R6525	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
C6525	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
R240	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
R340	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
T140	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
T340	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
R740xd2	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
MX740c	iDRAC9	4.00.00.00	N/A	N/A	N/A	1.00.01	N/A	2.0
MX840c	iDRAC9	4.00.00.00	N/A	N/A	N/A	1.00.01	N/A	2.0
R840	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
R940xa	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
R7425	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
R7415	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0

Table 14. Supported Remote Access Controllers and Solutions for Blade, Rack, and Tower Servers (continued)

Dell EMC devices	DRACs		MSM/CMC Firmware				BMC	Supported IPMI
	iDRAC Type	Supported DRAC FW version	M1000e CMC	VRTX CMC	FX2 CMC	MX7000 MSM		
R6415	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
M640-VRTX	iDRAC9	4.00.00.00	N/A	3.20	N/A	N/A	N/A	2.0
M640	iDRAC9	4.00.00.00	6.20	N/A	N/A	N/A	N/A	2.0
FC640	iDRAC9	4.00.00.00	N/A	N/A	2.20	N/A	N/A	2.0
R540	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
R440	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
T640	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
T440	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
R740xd	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
R940	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
R740	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
R640	iDRAC9	4.00.00.00	N/A	N/A	N/A	N/A	N/A	2.0
FC 430	iDRAC8	2.70.70.70	N/A	N/A	2.20	N/A	N/A	2.0
FC 630	iDRAC8	2.70.70.70	N/A	N/A	2.20	N/A	N/A	2.0
FC 830	iDRAC8	2.70.70.70	N/A	N/A	2.20	N/A	N/A	2.0
FM 120	iDRAC8	2.70.70.70	N/A	N/A	2.20	N/A	N/A	2.0
M430	iDRAC8	2.70.70.70	6.20	N/A	N/A	N/A	N/A	2.0
M630	iDRAC8	2.70.70.70	6.20	N/A	N/A	N/A	N/A	2.0
M630-VRTX	iDRAC8	2.70.70.70	N/A	3.20	N/A	N/A	N/A	2.0
M830	iDRAC8	2.70.70.70	6.20	N/A	N/A	N/A	N/A	2.0
M830-VRTX	iDRAC8	2.70.70.70	N/A	3.20	N/A	N/A	N/A	2.0
R230	iDRAC8	2.70.70.70	N/A	N/A	N/A	N/A	N/A	2.0
R330	iDRAC8	2.70.70.70	N/A	N/A	N/A	N/A	N/A	2.0
R430	iDRAC8	2.70.70.70	N/A	N/A	N/A	N/A	N/A	2.0
R530	iDRAC8	2.70.70.70	N/A	N/A	N/A	N/A	N/A	2.0
R630	iDRAC8	2.70.70.70	N/A	N/A	N/A	N/A	N/A	2.0
R730	iDRAC8	2.70.70.70	N/A	N/A	N/A	N/A	N/A	2.0
R730 XD	iDRAC8	2.70.70.70	N/A	N/A	N/A	N/A	N/A	2.0
R830	iDRAC8	2.70.70.70	N/A	N/A	N/A	N/A	N/A	2.0
R930	iDRAC8	2.70.70.70	N/A	N/A	N/A	N/A	N/A	2.0
T130	iDRAC8	2.70.70.70	N/A	N/A	N/A	N/A	N/A	2.0
T330	iDRAC8	2.70.70.70	N/A	N/A	N/A	N/A	N/A	2.0
T430	iDRAC8	2.70.70.70	N/A	N/A	N/A	N/A	N/A	2.0
T630	iDRAC8	2.70.70.70	N/A	N/A	N/A	N/A	N/A	2.0
M420	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0

Table 14. Supported Remote Access Controllers and Solutions for Blade, Rack, and Tower Servers (continued)

Dell EMC devices	DRACs		MSM/CMC Firmware				BMC	Supported IPMI
	iDRAC Type	Supported DRAC FW version	M1000e CMC	VRTX CMC	FX2 CMC	MX7000 MSM		
M520	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
M620	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
M820	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
R220	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
R320	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
R420	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
R520	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
R620	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
R720	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
M720 XD	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
M820	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
M920	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
T320	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
T420	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
T620	iDRAC7	2.60.60.60	N/A	N/A	N/A	N/A	N/A	2.0
M610	iDRAC6	3.85	6.20	N/A	N/A	N/A	N/A	2.0
M610x	iDRAC6	3.85	6.20	N/A	N/A	N/A	N/A	2.0
M710	iDRAC6	3.85	6.20	N/A	N/A	N/A	N/A	2.0
M710 HD	iDRAC6	3.85	6.20	N/A	N/A	N/A	N/A	2.0
M910	iDRAC6	3.85	6.20	N/A	N/A	N/A	N/A	2.0
M915	iDRAC6	3.85	6.20	N/A	N/A	N/A	N/A	2.0
R210	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
R210 II	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
R310	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
R410	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
R415	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
R510	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
R515	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
R610	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
R710	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
R715	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
R810	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
R815	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
R910	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
T110	iDRAC6	N/A	N/A	N/A	N/A	N/A	N/A	2.0

Table 14. Supported Remote Access Controllers and Solutions for Blade, Rack, and Tower Servers (continued)

Dell EMC devices	DRACs		MSM/CMC Firmware				BMC	Supported IPMI
	iDRAC Type	Supported DRAC FW version	M1000e CMC	VRTX CMC	FX2 CMC	MX7000 MSM		
T110 II	iDRAC6	N/A	N/A	N/A	N/A	N/A	N/A	2.0
T310	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
T410	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
T610	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0
T710	iDRAC6	2.9	N/A	N/A	N/A	N/A	N/A	2.0

Supported Remote Access Controllers and Solutions for Rack and Tower Servers

The following table lists the supported Remote Access Controllers and Solutions for Rack and Tower Servers.

Table 15. The following table lists the supported Remote Access Controllers and Solutions for Rack and Tower Servers

Dell System	DRACs		BMC FW Version	Supported IPMI Protocol Versions
	DRAC Type	Supported DRAC FW		
14th generatoin servers				
R7425	iDRAC9	2.85	1.92	2.0
R7415	iDRAC9	2.85	1.92	2.0
R6415	iDRAC9	2.85	1.92	2.0
R440	iDRAC9	2.85	1.92	2.0
R540	iDRAC9	2.85	1.92	2.0
R640	iDRAC9	2.85	1.92	2.0
R740	iDRAC9	2.85	1.92	2.0
R740xd	iDRAC9	2.85	N/A	2.0
R940	iDRAC9	2.85	N/A	2.0
T440	No iDRAC support		1.92	2.0
13th generatoin servers				2.0
R230	iDRAC8	2.85	1.92	2.0
R330	iDRAC8	2.85	1.92	2.0
R430	iDRAC8	2.85	N/A	2.0
R530	iDRAC8	2.85	N/A	2.0

Table 15. The following table lists the supported Remote Access Controllers and Solutions for Rack and Tower Servers (continued)

Dell System	DRACs		BMC FW Version	Supported IPMI Protocol Versions
	DRAC Type	Supported DRAC FW		
R630	iDRAC8	1.99	N/A	2.0
R730	iDRAC8	1.99	N/A	2.0
R730 XD	iDRAC8	1.99	N/A	2.0
R830	iDRAC8	1.99	N/A	2.0
R930	iDRAC8	1.99	N/A	2.0
T130	iDRAC8	1.99	N/A	2.0
T330	iDRAC8	2.40.40.40	N/A	2.0
T430	iDRAC8	2.40.40.40	N/A	2.0
T630	iDRAC8	2.40.40.40	N/A	2.0
12th generatoin servers				2.0
R220	iDRAC7	2.40.40.40	N/A	2.0
R320	iDRAC7	2.40.40.40	N/A	2.0
R420	iDRAC7	2.40.40.40	N/A	2.0
R520	iDRAC7	2.40.40.40	N/A	2.0
R620	iDRAC7	2.40.40.40	N/A	2.0
R720	iDRAC7	2.40.40.40	N/A	2.0
R720 XD	iDRAC7	2.40.40.40	N/A	2.0
R820	iDRAC7	2.40.40.40	N/A	2.0
R920	iDRAC7	2.40.40.40		
T320	iDRAC7	2.40.40.40		
T420	iDRAC7	1.99	1.95	2.0
T620	iDRAC7	2.40.40.40		
11th generatoin servers				2.0
R210	iDRAC6	2.40.40.40	N/A	2.0
R210 II	iDRAC6	2.40.40.40	N/A	2.0
R310	iDRAC6	2.40.40.40	N/A	2.0
R410	iDRAC6	2.40.40.40	N/A	2.0
R415	iDRAC6	2.40.40.40	N/A	2.0

Table 15. The following table lists the supported Remote Access Controllers and Solutions for Rack and Tower Servers (continued)

Dell System	DRACs		BMC FW Version	Supported IPMI Protocol Versions
	DRAC Type	Supported DRAC FW		
R510	iDRAC6	2.40.40.40	N/A	2.0
R515	iDRAC6	2.40.40.40	N/A	2.0
R610	iDRAC6	2.40.40.40	N/A	2.0
R710	iDRAC6	2.40.40.40	N/A	2.0
R715	iDRAC6	2.40.40.40	N/A	2.0
R810	iDRAC6	2.40.40.40	N/A	2.0
R815	iDRAC6	2.40.40.40	2.50	2.0
R910	iDRAC6	2.40.40.40	2.50	2.0
T110	iDRAC6	2.40.40.40	2.50	2.0
T110 II	iDRAC6	2.40.40.40	2.50	2.0
T310	iDRAC6	2.40.40.40	2.50	2.0
T410	iDRAC6			
T610	iDRAC6			
T710	iDRAC6			

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 4.00.00.00** —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 4.00.00.00** —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 4.00.00.00

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 4.00.00.00

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 4.00.00.00

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 16. 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		76	75	12
Windows Server 2019	X		X		
RHEL 7.8 and RHEL 7.9	Native Mozilla Firefox Web Browsers				
RHEL 8.2 and RHEL 8.3	Native Mozilla Firefox Web Browsers				
SLES 15 SP2	Native Mozilla Firefox Web Browsers				

4

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 yx2x, 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

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 Change management software on systems running supported Microsoft Windows operating systems.

Table 17. 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	Windows Server 2016	Windows server 2012 R2
yx5x generation of PowerEdge servers	D, S	D,S	
yx4x generation of PowerEdge servers	D, S	D, S	
yx3x generation of PowerEdge servers	D, S	D, S	
yx2x generation of PowerEdge servers	D, S	D	
yx1x generation of PowerEdge servers	D, S	D, S	D

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 Change management software on systems running supported Linux operating systems:

Table 18. Supported OpenManage Change Management Software on Systems Running Supported Red Hat Enterprise Linux Operating Systems.

Dell EMC Systems	SLES 15 SP2	RHEL 8.2 and RHEL 8.3	RHEL 7.8 and RHEL 7.9
yx5x generation of PowerEdge servers	D, S, L	D, S, L	D, S, L
yx4x generation of PowerEdge servers	D, S, L	D, S, L	D, S, L
yx3x generation of PowerEdge servers	D, S, L	D, S, L	D, S, L
yx2x generation of PowerEdge servers	D, S, L	D, S, L	D, S, L
yx1x generation of PowerEdge servers			

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 Change management software on systems running supported Virtualization operating systems.

Table 19. Supported OpenManage Change Management Software on Systems Running Supported Virtualization Operating Systems for VMware

Dell EMC Systems	VMware	
	vSphere 7.0 and vSphere 7.0 U1	vSphere 6.7 U3
yx5x generation of PowerEdge servers	*	*
yx4x generation of PowerEdge servers	*	*
yx3x generation of PowerEdge servers	*	*
yx2x generation of PowerEdge servers	*	*
yx1x generation of PowerEdge servers		

5

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:

Supported Microsoft Windows Pre-installation Environment for Deployment Toolkit v6.1.2

The following table lists the supported Microsoft Windows pre-installation environment for Dell Deployment Tool kit (DTK).

Table 20. Supported Microsoft Windows Pre-installation Environment for Dell Deployment Tool kit (DTK)

Windows Preinstallation Environment	DTK
5.1(64-bit)	X
10 (64-bit)	X

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 21. Supported Microsoft Windows Server Operating Systems for RACADM

RACADM utility	Microsoft Windows Server 2019	Microsoft Windows Server 2016	Microsoft Windows Servers 2012 R2
Service Pack	NA	NA	NA
Remote RACADM	X	X	X
Local RACADM	X	X	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 22. Supported Linux Operating Systems for RACADM

RACADM utility	RHEL 7.x	RHEL 8.x
Remote RACADM	X	X
Local RACADM	X	X

Supported Virtualization Operating Systems For The RACADM Utility

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

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

Table 23. Supported virtual Operating Systems for RACADM

RACADM utility	vSphere 6.7	vSphere 6.5 U1	vSphere 6.0 U3	Microsoft Hyper-V for Windows 2012 R2
Remote RACADM	X	X	X	X
Local RACADM	X	X	X	X

Supported Microsoft Windows Operating Systems for VMCLI and iVMCLI

The following table lists the supported Microsoft Windows operating systems for VMCLI and iVMCLI.

An ' **X** ' in the operating system column indicates support for the VMCLI and iVMCLI.

Table 24. Supported Microsoft Windows Server Operating Systems for VMCLI and iVMCLI

Microsoft Windows Server	VMCLI and iVMCLI
Windows Server 2016	X
Microsoft Windows Server 2012	X
Microsoft Windows Server 2012 R2	X

Supported Linux Operating Systems for the VMCLI and iVMCLI

The following table lists the supported Linux operating systems for VMCLI and iVMCLI.

An ' **X** ' in the operating system column indicates support for the VMCLI and iVMCLI utility.

Table 25. Supported Linux Operating Systems for VMCLI and iVMCLI

Supported Linux Operating Systems	VMCLI	iVMCLI
SLES 15	X	
RHEL 7.5	X	X
RHEL 6.10	X	X

Supported Microsoft Windows Operating Systems for IPMITool In-Band

The following table lists the supported Windows operating systems for the IPMITool In-Band.

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

Legend for reference:

- MS-WS — Microsoft Windows Server
- MS-WSBS — Microsoft Windows Small Business Server
- MS-WSS — Microsoft Windows Storage Server
- MS-W-Vista — Microsoft Windows Vista
- MS-W-XP — Microsoft Windows XP
- MS-W 7.0 — Microsoft Windows 7.0
- F — Foundation Edition
- B — Basic
- Exp — Express
- WG — Workgroup
- Ess —Essentials Edition
- Std — Standard Edition
- Ent — Enterprise Edition
- DC — DataCenter Edition
- W — Web Edition

Table 26. Supported Microsoft Windows Operating Systems for IPMITool In-Band

	MS-WS 2008 (32-bit and 64-bit)	MS-WS 2008 R2 (64-bit)	MS-W-XP (32-bit)	MS-W-XP (32-bit)	MS-W-XP (64-bit)	MS-W 7.0 (32-bit)	MS-W 7.0 (64-bit)	MS-WS 2012	MS-WS 2012 R2
Edition	SP1/SP2	SP1/SP2	SP3	SP2	SP2				
IPMITool	X	X	X					X	X
IPMITool In-Band	X	X	X	X	X	X	X	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 27. Supported Linux Operating Systems for IPMITool In-Band

Supported Linux Operating Systems	IPMITool In-Band
RHEL 8.x	X

Table 27. Supported Linux Operating Systems for IPMITool In-Band (continued)

Supported Linux Operating Systems	IPMITool In-Band
RHEL 7.x	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 28. 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
Windows Server 2016	X
Windows Server 2012 R2	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 29. Supported Linux Operating Systems for IPMITool

Supported Linux Operating Systems	IPMITool Out-of-Band
RHEL 8.x	X
RHEL 7.x	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 30. Supported Microsoft Windows Server Operating Systems for IPMITool

Supported Microsoft Windows Server Operating System	IPMITool
Windows Server 2019	X
Windows Server 2016	X
Windows Server 2012 R2	X

Supported Linux Operating Systems for IPMITool BMU

The following table lists the supported Linux operating systems for the IPMITool BMU.

An ' **X** ' in the operating system column indicates BMU support.

Table 31. Supported Linux Operating Systems for IPMITool

Supported Linux Operating System	IPMITool BMU
SLES 15	X
RHEL 7.5	X
RHEL 6.10	X

Supported Virtualization Operating Systems for IPMITool

The following table lists the supported Virtualization operating systems for the IPMITool.

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

Table 32. Supported Virtualization operating systems for the IPMITool

Supported Virtualization operating system	IPMITool
vSphere 6.5 U1	X
vSphere 6.0 U3	X

6

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:

Table 33. NIC Manufacturers and Drivers Required for Supported Microsoft Windows Operating Systems

NIC Product Name	Microsoft Windows Server Family
Broadcom BCM57504 25G KR Quad Port Fab AB Mezz	21.60.29.36
Intel(R) Ethernet 25G 2P E810-XXV OCP	Native
Intel(R) Ethernet 25G 2P E810-XXV Adapter	Native
Intel(R) Ethernet 10G 4P X710/I350 rNDC	19.5.0
Intel FPGA Programmable Acceleration Card D5005	Native
Dual Port 10Gb Ethernet (BCM57810S) LOM (FC430)	Native
Marvell QLogic Fibre Channel Single Port 32GFC PCIe Gen4 x8 Adapter	35.15.00
Marvell QLogic Fibre Channel Dual Port 32GFC PCIe Gen4 x8 Adapter	35.15.00
QLogic 57810S-K Dual Port 10Gb bNDC KR CNA	35.15.00
QLogic 57810S-k Dual Port 10Gb bMezz KR CNA	35.15.00
QLogic 57840S-K Quad Port 10Gb bNDC KR CNA	35.15.00

Table 34. NIC Manufacturers and Drivers Required for Supported Red Hat Enterprise Linux Operating Systems

NIC Product Name	Red Hat Enterprise Linux 7,8, 7.9, 8.2, and 8.3 and SLES 15 SP2
Broadcom BCM57504 25G KR Quad Port Fab AB Mezz	21.6.2
Intel(R) Ethernet 25G 2P E810-XXV OCP	NA
Intel(R) Ethernet 25G 2P E810-XXV Adapter	NA
Intel(R) Ethernet 10G 4P X710/I350 rNDC	NA
Intel FPGA Programmable Acceleration Card D5005	NA
Dual Port 10Gb Ethernet (BCM57810S) LOM (FC430)	NA
Marvell QLogic Fibre Channel Single Port 32GFC PCIe Gen4 x8 Adapter	35.15.00.08
Marvell QLogic Fibre Channel Dual Port 32GFC PCIe Gen4 x8 Adapter	35.15.00.08
QLogic 57810S-K Dual Port 10Gb bNDC KR CNA	Native
QLogic 57810S-k Dual Port 10Gb bMezz KR CNA	Native
QLogic 57840S-K Quad Port 10Gb bNDC KR CNA	35.15.00.08

7

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, HBA 330 MX, HBA 330 MMZ, PERC H745P MX, PERC H730P MX, PERC H745 Front,PERC H745 Adapter,PERC H345 Front,PERC H345 Adapter,HBA345 Adp,HBA345 Frnt, PERC H755N, PERC H755 Adapter, PERC H755 Front, HBA 355i Frnt, HBA 355i Adpt. and Dell PowerEdge PCIe Express Flash SSD.
- The RAID controller card group supports the following operating systems: Windows Server 2019, VMWare ESXi 7.0, VMWare ESXi 7.0 U1, VMware, VMware ESXi 6.7 U3, Red Hat Enterprise Linux 7.8, Red Hat Enterprise Linux 7.9, Red Hat Enterprise Linux 8.2, and Red Hat Enterprise Linux 8.3.

NOTE: The supported devices for yx5x generation of PowerEdge servers are PERC H730 and PERC H730P, PERC H740 and PERC H740P, PERC S150, PERC H745 Front,PERC H745 Adapter,PERC H345 Front,PERC H345 Adapter,HBA345 Adp,HBA345 Frnt, SAS12 Gbps, HBA330, PERC H755N, PERC H755 Adapter, PERC H755 Front, HBA 355i Frnt, HBA 355i Adpt 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:

- PERC H800 Adapter
- PERC H830 Adapter, Mini Monolithic
- PERC H200 Adapter, Integrated, and Modular
- PERC H310 Adapter, Mini Blade, and Mini Monolithic
- PERC HBA 330 Adapter and Mini
- PERC H710 and H710P Adapter, Mini Blade, and Mini Monolithic
- PERC H710P Adapter, Mini Blade, and Mini Monolithic
- PERC H730 and H730P Adapter, Mini Blade, and Mini Monolithic
- PERC H730P Adapter and Mini
- PERC H810 Adapter
- PERC S100
- PERC S110
- PERC S300
- PowerEdge PCIe Express Flash SSD
- SAS 12Gbps HBA
- Internal Tape Adapter

Linux Driver Included in RPM

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

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 35. PERC 6/i Integrated and Adapter

Storage Management Service supported elements	Version
Storage Management Service version	6.5.0
Server Administrator Version	9.5
PERC Firmware Version	6.3.3-0002
Red Hat Enterprise Linux 7.x Driver	Native
Red Hat Enterprise Linux 8.x Driver	Native

PERC 6E Adapter

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

The PERC 6/E Adapter supports six storage enclosures.

Table 36. PERC 6/E Adapter

Storage Management Service supported elements	Version
Storage Management Service Version	6.5.0
Server Administrator Version	9.5

Table 36. PERC 6/E Adapter (continued)

Storage Management Service supported elements	Version
PERC Firmware Version	6.3.3-0002

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 37. SAS 6/iR Integrated and Adapter

Storage Management Service supported elements	Version
Storage Management Service Version	6.5.0
Server Administrator Version	9.5
SAS Firmware/ BIOS Version	00.25.47.00/06.22.03.00
Red Hat Enterprise Linux 7.x Driver	Native
Red Hat Enterprise Linux 8.x Driver	Native

SAS 6iR int Modular

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

Table 38. SAS 6/iR Integrated and Adapter

Storage Management Service supported elements	Version
Storage Management Service version	6.5.0
Server Administrator Version	9.5
SAS Firmware/BIOS Version	00.25.47.00/06.22.03.00
Red Hat Enterprise Linux 7.x Driver	Native
Red Hat Enterprise Linux 8.x Driver	Native

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 39. SAS 6 Gbps HBA

Storage Management Service supported elements	Version
Storage Management Service version	6.5.0
Server Administrator Version	N/A
Firmware Version	07.03.06.00
Red Hat Enterprise Linux 7.x Driver	Native
Red Hat Enterprise Linux 8.x Driver	Native

Table 39. SAS 6 Gbps HBA (continued)

Storage Management Service supported elements	Version
VMware ESXi 6.5 U3 Driver	Native
VMware ESXi 6.7 U2 Driver	Native
VMware ESXi 6.7 U3 Driver	Native

LSI Logic 1020/1030 Ultra320 SCSI Adapter

LSI Logic 1020/1030 Ultra320 SCSI adapter supports the following Dell PowerEdge systems: R200, R220, R300, R900, R805, R905, T100, T105, T300, and T605.

The following tables list the other elements supported by LSI Logic 1020/1030 Ultra320 SCSI adapter.

Table 40. Storage Management Service Supported Elements: LSI Logic 1020/1030 Ultra320 SCSI Adapter

Storage Management Service version	Server Administrator Version	PERC Firmware/BIOS Version
5.0.1	8.1	1.03.27.00.5.10.08.00.12

Windows 2008 R2 SP1	Windows 2012 Driver	Windows 2012 Driver R2	Red Hat Enterprise Linux 6.5 Driver	Red Hat Enterprise Linux 7 Driver	SUSE Linux Enterprise Server 11 SP3 Driver	SUSE Linux Enterprise Server 12 Driver
Native	Not Applicable	Not Applicable	Native	Native	Native	Native

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 41. Dell EMC OpenManage Supported Elements: PERC H700 Adapter, Integrated, and Modular

Storage Management Service supported elements	Version
Storage Management Service Version	6.5.0
Server Administrator Version	9.5
PERC Firmware Version	12.10.7-0001
Windows Server 2016 / 2019 Driver	Native / Not Applicable
Red Hat Enterprise Linux 7.x	Native
Red Hat Enterprise Linux 8.x	Native

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 42. PERC H800 Adapter

Storage Management Service supported elements	Version
Storage Management Service version	6.5
Server Administrator Version	9.5
PERC Firmware Version	12.10.7-0001
Windows Server 2016 / 2019 Driver	Native / Not Applicable
Red Hat Enterprise Linux 7.x	Native
Red Hat Enterprise Linux 8.x	Native

PERC H830 Adapter, Mini Monolithic

The PERC H830 Adapter, Mini Monolithic support the following PowerEdge systems: R430, R530, R,630, 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 43. PERC H830 Adapter, Mini Monolithic controllers

Storage Management Service supported elements	Version
Storage Management Service version	6.5.0
Server Administrator Version	9.5
PERC Firmware Version	25.5.6.0009
Windows Server 2016 / 2019 Driver	6.604.06.00 / Native
Red Hat Enterprise Linux 7.x	Native
Red Hat Enterprise Linux 8.x	Native
VMware ESXi 7.0 and VMware ESXi 7.0 U1	Native
VMware ESXi 6.7 U3 Driver	Native

PERC H200 Adapter, Integrated, and Modular

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

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

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

Table 44. PERC H200 Modular controllers

Storage Management Service supported elements	Version
Storage Management Service version	6.5.0
Server Administrator Version	9.5
PERC Firmware Version	07.03.06.00
Red Hat Enterprise Linux 7.x Driver	Native
Red Hat Enterprise Linux 8.x Driver	Native

PERC H310 Adapter, Mini Blade, and Mini Monolithic

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

Table 45. PERC H310 Adapter, Mini Blade, and Mini Monolithic controllers

Storage Management Service supported elements	Version
Storage Management Service version	6.5.0
Server Administrator Version	9.5
PERC Firmware Version	20.13.3-0001
Windows Driver	6.805.03.00 / Not applicable
Red Hat Enterprise Linux 7.x Driver	Native
Red Hat Enterprise Linux 8.x Driver	Native
VMware ESXi 7.0 Driver and VMware ESXi 7.0 U1 Driver	Native
VMware ESXi 6.7 U3 Driver	Native

PERC HBA 330 Adapter and Mini

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

Table 46. OpenManage supported elements: PERC HBA 330 Adapter

OpenManage supported elements	Version
Storage Management Service version	6.0.1
Server Administrator Version	9.1
PERC Firmware Version	25.5.2.0001
Windows Server 2016 Driver	6.604.06.00
Windows Server 2012 Driver	6.604.06.00
Windows Server 2012 R2 Driver	6.604.06.00
Red Hat Enterprise Linux 6.9	Native
Red Hat Enterprise Linux 7.4	Native
SUSE Linux Enterprise Server 11 SP4 Driver	Native
SUSE Linux Enterprise Server 12 SP3 Driver	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 47. PERC H710 Adapter, Mini Blade, and Mini Monolithic controllers

Storage Management Service supported elements	Version
Storage Management Service version	6.5.0
Server Administrator Version	9.5

Table 47. PERC H710 Adapter, Mini Blade, and Mini Monolithic controllers (continued)

Storage Management Service supported elements	Version
PERC Firmware Version	21.3.5-0002
Windows Server 2016 / 2019 Driver	6.805.03.00 / Not Applicable
Red Hat Enterprise Linux 7.x	Native
Red Hat Enterprise Linux 8.x	Native
VMware ESXi 7.0 and VMware ESXi 7.0 U1	Native
VMware ESXi 6.7 U3 Driver	Native

PERC H710P Adapter, Mini Blade, and Mini Monolithic

The PERC H710P Adapter, Mini Blade, and Mini Monolithic support the following Dell PowerEdge systems: R620, R720, R720XD, R820, M520, M620, R220, R320, R420, R520, T320, T420 and T620.

The following tables list the other elements supported by the PERC H710P Adapter, Mini Blade, and Mini Monolithic controllers.

Table 48. Dell OpenManage Supported Elements: PERC H710P Adapter, Mini Blade, and Mini Monolithic

Storage Management Service version	5.4
Server Administrator Version	9.1
PERC Firmware Version	21.3.2-0005
Windows Server 2008 32-bit Driver	6.803.21.00
Windows Server 2008 64-bit Driver	6.803.21.00
Windows Server 2008 R2 Driver	6.803.21.00
Windows Server 2012 Driver	6.805.21.00

Table 49. Dell OpenManage Supported Elements: PERC H710P Adapter, Mini Blade, and Mini Monolithic

Windows Server 2012 R2 Driver	6.805.21.00
Red Hat Enterprise Linux 6.7	Native
Red Hat Enterprise Linux 7.2	Native
SUSE Linux Enterprise Server 11 SP4 Driver	Native
SUSE Linux Enterprise Server 12 SP1 Driver	Native
VMware ESXi 5.x Driver	Native
VMware ESXi 6.0 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 50. PERC H730/H730P Adapter, Mini Blade, and Mini Monolithic controllers

Storage Management Service supported elements	Version
Storage Management Service version	6.5.0
Server Administrator Version	9.5

Table 50. PERC H730/H730P Adapter, Mini Blade, and Mini Monolithic controllers (continued)

Storage Management Service supported elements	Version
PERC Firmware Version	25.5.6.0009
Windows Server 2016 / 2019 Driver	6.604.06.00 / Native
Red Hat Enterprise Linux 7.x	Native
Red Hat Enterprise Linux 8.x	Native
VMware ESXi 7.0 and VMware ESXi 7.0 U1	Native
VMware ESXi 6.7 U3 Driver	Native

PERC H730P Adapter and Mini

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

Table 51. OpenManage Supported Elements: PERC H730P

OpenManage Supported elements	Version
Storage Management Service version	6.0.1
Server Administrator Version	9.1
PERC Firmware Version	25.5.2.0001
Windows Server 2012 Driver R2	6.604.06.00
Red Hat Enterprise Linux 6.9	Native
Red Hat Enterprise Linux 7.3	Native
SUSE Linux Enterprise Server 12 SP2 Driver	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 52. PERC H810 Adapter controller

Storage Management Service supported elements	Version
Storage Management Service version	6.5.0
Server Administrator Version	N/A
PERC Firmware Version	21.3.5-0002
Red Hat Enterprise Linux 7.x	Native
Red Hat Enterprise Linux 8.x	Native
VMware ESXi 7.0 and VMware ESXi 7.0 U1	Native
VMware ESXi 6.7 U3 Driver	Native
Windows Server 2016	6.805.03.00
Windows Server 2019	Not Applicable

PERC S100

The PERC S100 controller supports the following Dell PowerEdge systems: R210, R210 II, R220, R310, R410, R510, R920, T110, T110 II, T310, and T410.

The following tables list the other elements supported by the PERC S100 controller.

Table 53. Dell OpenManage Supported Elements: PERC S100

Storage Management Service supported elements	Version
Storage Management Service version	5.4
Server Administrator Version	9.1
PERC Firmware Version	2.0.0-0162
Windows Server 2016 Driver	Not Supported
Windows Server 2012 Driver	Not Supported
Windows Server 2012 R2 Driver	Not Supported
VMware ESXi 6.0 U3 Driver	Not Supported
VMware ESXi 6.5 U1 Driver	Not Supported

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 54. Dell EMC OpenManage Supported Elements: PERC S110

Storage Management Service supported elements	Version
Storage Management Service version	6.5.0
Server Administrator Version	9.5
PERC Firmware Version	3.0.0.0139
Windows Server 2016 / 2019 Driver	Native / Not Supported
Red Hat Enterprise Linux 7.x	Not Supported
Red Hat Enterprise Linux 8.x	Not Supported
VMware ESXi 7.0 and VMware ESXi 7.0 U1	Not Supported
VMware ESXi 6.7 U3 Driver	Not Supported

PERC S300

The PERC S300 controller supports the following Dell PowerEdge systems: R210, R210 II, R220, R310, R410, R415, R510, R515, T110, T110 II, T310, and T410

The following tables list the other elements supported by the PERC S300 controller.

Table 55. Dell OpenManage Supported Elements: PERC S300

Storage Management Service supported elements	Version
Storage Management Service version	5.4
Server Administrator Version	9.1

Table 55. Dell OpenManage Supported Elements: PERC S300 (continued)

Storage Management Service supported elements	Version
PERC Firmware Version	2.0.0-0166+00193000
Windows Server 2016 Driver	Not Applicable
Windows Server 2012 Driver	Not Applicable
Windows Server 2012 R2 Driver	Not Applicable
Red Hat Enterprise Linux 6.9 Driver	Not Supported
Red Hat Enterprise Linux 7.4 Driver	Not Supported
SUSE Linux Enterprise Server 11 SP4 Driver	Not Supported
SUSE Linux Enterprise Server 12 SP3 Driver	Not Supported
VMware ESXi 6.0 U3 Driver	Not Supported
VMware ESXi 6.5 U1 Driver	Not Supported

PowerEdge PCIe Express Flash SSD

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

Table 56. PowerEdge PCIe Express Flash SSD

Storage Management Service supported elements	Version
Storage Management Service version	6.5.0
Server Administrator Version	9.5
PERC Firmware Version	B1442808
Windows Server 2019 Driver	Not Supported

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 57. Storage Management Service supported elements: SAS 12Gbps HBA

Storage Management Service supported elements	Version
Storage Management Service version	6.5.0
Server Administrator Version	9.5
PERC Firmware Version	16.17.00.05
Windows Server 2016 / 2019 Driver	2.51.21.2
Red Hat Enterprise Linux 7.x	Native
Red Hat Enterprise Linux 8.x	Native
VMware ESXi 7.0 and VMware ESXi 7.0 U1	Native
VMware ESXi 6.7 U3 Driver	Native

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 58. Internal Tape Adapter controllers

Storage Management Service supported elements	Version
Storage Management Service version	6.5.0
Server Administrator Version	N/A
PERC Firmware Version	07.03.06.00
Red Hat Enterprise Linux 7.x Driver	Native
Red Hat Enterprise Linux 8.x Driver	Native
Windows Server 2016 / 2019 Driver	Native / Not Applicable
VMware ESXi 7.0 and VMware ESXi 7.0 U1	Not Supported
VMware ESXi 6.7 U3 Driver	Native