




Dell Storage PowerTools Server Hardware Manager 1.7 Support Matrix



Notes, cautions, and warnings

-  **NOTE:** A NOTE indicates important information that helps you make better use of your computer.
-  **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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Contents

| | |
|--|-----------|
| 1 Introduction | 4 |
| 2 Dell Storage enclosure rules | 5 |
| 3 Supported software, firmware, and hardware..... | 6 |
| Supported storage enclosure firmware | 6 |
| Supported operating systems | 6 |
| Supported SAS host bus adapters (HBAs) | 7 |
| Supported Dell servers | 9 |
| Supported physical disk drives | 9 |
| 4 Getting help..... | 10 |
| Contacting Dell..... | 10 |

Introduction

When an enclosure is used for server or enclosure expansion, it is known as a storage enclosure. This document provides information about supported software, firmware, and hardware for Dell Storage when used as a storage enclosure.

 **NOTE:** When the Dell PowerVault MD3060e is used for MD3XXX Series (MD32XX/MD36XX/MD38XX) Storage Array expansion, it is referred to as an expansion enclosure. For more information about the Dell PowerVault MD3060e when used as an expansion enclosure, refer to the *MD3XXX Series Storage Array Support Matrix* available at Dell.com/support.

 **NOTE:** This Support Matrix contains the latest compatibility and interoperability information. This document supersedes all other documentation information.

Dell Storage enclosure rules

For more information about the supported enclosure, refer to the Support Matrix available at [Dell.com/support](https://www.dell.com/support).

Supported software, firmware, and hardware

This chapter describes the supported configurations, such as storage enclosure firmware, operating systems (OSs), SAS host bus adapters (HBAs), Dell servers, and physical disk drives.

Supported storage enclosure firmware

Dell Storage enclosures have two Enclosure Management Modules (EMMs). EMMs must have the same firmware version. EMMs do not automatically synchronize firmware, and must be upgraded individually.

Table 1. Storage enclosure firmware

| Enclosure model | Earliest firmware version supported |
|----------------------------|-------------------------------------|
| Dell PowerVault MD3060e | 03.9D |
| Dell Storage MD1400/MD1420 | 1.02 |
| Dell Storage MD1200/MD1220 | 1.05 |
| Dell Storage MD1280 | 2.14f |

Supported operating systems

When clustering is supported by the OS, clustering is also supported on the Dell Storage enclosure, subject to the following limitations:

Table 2. Supported OS

| OS | SAS host server | Notes and required hotfixes |
|---|-----------------|--|
| Windows | | |
| Windows Server 2012 R2 Standard Server and Core | ✓ | Ensure that you apply the latest OS updates. |
| Windows Server 2012 R2 Datacenter Server and Core | ✓ | Ensure that you apply the latest OS updates. |
| Linux | | |
| Red Hat Enterprise Linux/CentOS 7.x | ✓ | Ensure that you apply the latest OS updates. |
| Red Hat Enterprise Linux/CentOS 6.5, 6.6, and 6.7 | ✓ | Ensure that you apply the latest OS updates. |

| OS | SAS host server | Notes and required hotfixes |
|-----------------------------------|-----------------|---|
| SUSE Linux Enterprise Server 12.x | ✓ | Ensure that you apply the latest OS updates. |
| SUSE Linux Enterprise Server 11.3 | ✓ | Ensure that you apply the latest OS updates. |
| Ubuntu 14.04 LTS | ✓ | Ensure that you apply the latest OS updates. |
| Ubuntu 12.04 LTS | ✓ | Ensure that you apply the latest OS updates. |
| VMware | | |
| ESXi 5.5 | ✓ | Server Hardware Manager CLI (<code>shmccli</code>) command only |
| ESXi 6.0 | ✓ | Server Hardware Manager CLI (<code>shmccli</code>) command only |

Supported SAS host bus adapters (HBAs)

The following HBAs are supported with the Dell Storage enclosures:

- LSI 9207-8e SAS HBA (for Dell PowerEdge 12th and 13th generation servers)
- Dell 12 Gbps SAS HBA (only for Dell PowerEdge 13th generation servers): Support for three MD1400 or MD1420 enclosures only.
- LSI 9207-8i SAS HBA (only for Dell PowerEdge 12th generation servers)
- LSI 9300-8e (only for Dell PowerEdge 13th generation servers)

You can obtain the supported HBA drivers and firmware from the Dell support website at Dell.com/support.

Table 3. Supported HBA components

| Vendor | Model | Component | Minimum version required |
|--------|-----------------|------------------|--------------------------|
| LSI | 9207-8e | Firmware | 20.00.00.00 |
| | | Windows driver | 2.069.1 |
| | | RHEL driver | 18.00.00.00-1 |
| | | Ubuntu driver | 18.00.00.00-1 |
| Dell | 12 Gbps SAS HBS | Firmware | 03.09.00.00 |
| | | Windows driver | 2.50.75.01 |
| | | RHEL/SLES driver | 4.00.01.00 |
| | | Ubuntu driver | Not supported on Ubuntu |
| LSI | 9207-8i | Firmware | 20.00.00.00 |
| | | Windows driver | 2.069.1 |
| | | RHEL driver | 18.00.00.00-1 |

| Vendor | Model | Component | Minimum version required |
|---------------|----------------|------------------|---------------------------------|
| LSI | 9265 | Ubuntu driver | 18.00.00.00-1 |
| | | Firmware | 20.00.00.00 |
| | | Windows driver | 2.069.1 |
| | | RHEL driver | 18.00.00.00-1 |
| LSI | LSI 9300-8e | Ubuntu driver | 18.00.00.00-1 |
| | | Firmware | 8.21.00.00 |
| | | Windows driver | 2.51.01.00 |
| | | RHEL driver | 10.00.00.00-1 |
| LSI | LSI 9286-8e | Ubuntu driver | 10.00.00.00-1 |
| | | Firmware | 23.34.0-0005 |
| | | Windows driver | 2.069.1 |
| | | RHEL driver | 18.00.00.00-1 |
| LSI | LSI 9361-8i | Ubuntu driver | 18.00.00.00-1 |
| | | Firmware | 24.3.0-0050 |
| | | Windows driver | 2.51.01.00 |
| | | RHEL driver | 18.00.00.00-1 |
| Dell PERC | H310/H710/H810 | Ubuntu driver | 18.00.00.00-1 |
| | | Firmware | 21.0.2-0001 |
| | | Windows driver | 6.803.21.00 |
| Dell PERC | H730/H830 | RHEL driver | 6.902.01.00 |
| | | Firmware | 25.2.2-0004 |
| | | Windows driver | 6.602.07.00 |
| | | RHEL driver | 06.901.04.00 |

Supported Dell servers

Table 4. Supported Dell host servers

| Model | Maximum HBAs | Notes |
|--|--------------|---|
| Dell PowerEdge R630 | 2 or 3 | The Dell PowerEdge R630 is available in 2-slot and 3-slot configurations. |
| Dell PowerEdge R730 | 4 | Low profile HBAs are limited to a maximum of three. |
| Dell PowerEdge R730xd | 3 | |
| Dell PowerEdge R620 | 2 or 3 | The Dell PowerEdge R620 is available in 2-slot and 3-slot configurations. |
| Dell PowerEdge R720 | 4 | Low profile HBAs are limited to a maximum of three. |
| Dell PowerEdge R720xd | 3 | |
| Dell Datacenter Scalable Solutions DSS7000 | 2 | |

Supported physical disk drives

For the latest available physical disk drive firmware, refer to the specific Dell storage enclosure **Drivers and Downloads** section at [Dell.com/support](https://www.dell.com/support).

Getting help

Contacting Dell

Dell provides several online and telephone-based support and service options. If you do not have an active internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical assistance, or customer-service issues:

1. Go to **Dell.com/support**.
2. Select your country from the drop-down menu on the bottom right corner of the page.
3. For customized support:
 - a. Enter your system Service Tag in the **Enter your Service Tag** field.
 - b. Click **Submit**.
The support page that lists the various support categories is displayed.
4. For general support:
 - a. Select your product category.
 - b. Select your product segment.
 - c. Select your product.
The support page that lists the various support categories is displayed.
5. For contact details of Dell Global Technical Support:
 - a. Click [Global Technical Support](#).
 - b. The **Technical Support** page is displayed with details to call, chat, or e-mail the Dell Global Technical Support team.