

DELL(TM) OPENMANAGE(TM) SERVER ADMINISTRATOR STORAGE MANAGEMENT
Version 3.5
Release Notes

This is the readme file for Dell OpenManage Server Administrator Storage Management version 3.5. For additional information, see the Server Administrator readme file and the "Dell OpenManage Server Administrator User's Guide."

Note: The Storage Management service is installed using the Server Administrator installation process. See the installation readme (readme_ins.txt) on the "Dell Systems Management Tools and Documentation" DVD for the latest installation information.

Note: Installing the Storage Management service on a system that does not have a supported controller or that has a controller that is not attached to storage is not supported. It is recommended to use Server Administrator Storage Management 3.5 only on controllers that have PERC 7.2 firmware or later. If you install or run Storage Management using an unsupported configuration, it can result in unexpected and undesirable system behavior.

Note: With Dell OpenManage Systems Management software version 5.0 or later, Array Manager is not an installable option. If the Array Manager is installed on your system and you need information on how to migrate from Array Manager to Storage Management, see the product documentation prior to Storage Management 2.1 or the Systems Management software version 5.1.

What's New in this Release

This release of Storage Management provides the following new features:

- The GUI in storage enclosures displays the Dell System Express Service Code along with the Dell System Service Tag.
- With Solid State Disks (SSDs), you can configure a CacheCade for your virtual disks. For more information, see CacheCade Using Solid State Drives.
- With the latest firmware, SATA drives with capacity of more than 2 TB are supported. For the minimum required firmware and driver versions, go to the Dell OpenManage Server Administrator and click Storage? Storage Controller? Firmware/Driver Version.
- The new Dell PowerEdge RAID Controller (PERC) H200 driver and

firmware supports 3 TB NL SAS hard drives,
3 TB NL SATA hard drives, and SAS SSDs.

- Added support for the following operating systems:
 - Microsoft Windows Server 2008 R2 x64 SP1
 - Microsoft Windows Small Business Server 2011
 - VMware ESX 4.1 Update 1
 - VMware ESXi 4.1 Update 1
 - VMware ESX 4.0 Update 3
 - VMware ESXi 4.0 Update 3
 - Citrix Xen Server 5.6 FP1

For information on Alert Messages,
see the Dell OpenManage Server Administrator Messages Reference Guide
and for information on Command Line Interface,
see Dell OpenManage Server Administrator Command Line Interface User's Guide,
at support.dell.com/manuals.

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Title and Description
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Server Administrator Storage Management is a storage management application for your systems that provides enhanced features for configuring a system's locally-attached RAID and non-RAID disk storage. Server Administrator Storage Management enables you to perform controller and enclosure functions for all supported RAID and non-RAID controllers and enclosures from a single graphical or command-line interface without using the controller BIOS utilities. The graphical user interface (GUI) is wizard-driven with features for novice and advanced users and detailed online help. The command line interface is fully-featured and scriptable.

The Storage Management service supports SCSI, SATA, and SAS technologies.

Installation

The Storage Management service is installed using the Server Administrator installation process. For Server Administrator installation requirements, see the following documentation:

* The installation readme (readme_ins.txt) on the "Dell Systems Management Tools and Documentation" DVD for the latest installation information.

- * The "Installing Server Administrator" chapter in the Server Administrator User's Guide.

In addition to the Server Administrator installation requirements, the following requirements apply to Storage Management. Storage Management may experience instability if these requirements are not met.

- * Microsoft(R) Windows Server(R) 2003 with Service Pack 1 or later, Microsoft Windows Server 2008 Service Pack 1, Microsoft Windows Server 2008 R2 x64 SP1, Microsoft Windows Small Business Server 2011 and Microsoft Windows HPC Server 2008 is required to support SAS technology.
- * Windows(R) 2000 Server 32-bit with Service Pack 4 or later required to support SAS technology.
NOTE: Windows 2000 Server 64-bit is not supported.
- * Red Hat(R) Enterprise Linux(R) 5.x. or later is required for Storage Management and Red Hat(R) Enterprise Linux(R) Update 7 or later is required for the Red Hat Network (RHN) service to update your system software with the latest update package before deploying your system. See "www.redhat.com" to access the RHN service and download updates.
- * VMware ESX 4.1 Update 1 and later, VMware ESXi 4.0 Update 1 and later and Citrix Xen Server 5.6 FP1
- * SUSE Linux Enterprise Server 10 for Intel(R) EM64T with Service Pack 3 or later and SUSE Linux Enterprise Server 11 with Service Pack 1 is required to support SAS technology.

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COMPATIBILITY WITH OTHER RAID STORAGE MANAGEMENT UTILITIES
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- * PERC Console and FAST Compatibility Issues when Installing Storage Management

Installing Storage Management on a system that has FAST or the PERC Console installed is not supported. It is recommended that you uninstall FAST and the PERC Console before installing Storage Management. Storage Management or the FAST features may be disabled at run time when using Storage Management on a system that also has FAST installed. Storage Management replaces all storage management features provided by FAST and the PERC Console. In addition, Storage Management has features not provided by FAST and the PERC Console.

- * Compatibility with Linux Utilities

Installing Storage Management on a system running a Linux operating system and configured with 3rd party RAID storage management

utilities is not supported. It is recommended that you uninstall these utilities before installing Storage Management. Storage Management replaces the storage management features provided by these utilities. Examples of 3rd party Linux utilities include:

- LinFlash
- DellMgr
- DellMON
- LINLib
- MegaMgr
- MegaMON

Note: These utilities are only applicable to the following controllers:
PERC 4/SC, 4/DC, 4e/DC, 4/Di, 4/IM, 4e/Si, 4e/Di.

* See the "Installing Server Administrator" chapter in the Server Administrator User's Guide.

Note: You cannot reinstall Storage Management on a system that already has Storage Management installed. If you need to reinstall Storage Management, you must first uninstall the existing installation using the Server Administrator uninstallation process.

Note: Installing Storage Management on a system that does not have a supported controller or that has a controller that is not attached to storage is not supported. If you install or run Storage Management on an unsupported configuration, unexpected and undesirable system behavior may occur. It is recommended to use Server Administrator Storage Management 3.5 on controllers that have PERC 7.2 firmware or later only.

See the WARNINGS section of this readme for additional information.

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2 - Recommended

Note: The Storage Management service does not support Novell(R) NetWare(R) operating systems or fibre channel storage. the Storage Management service does not provide Disk and volume management.

WARNINGS

* As a general rule, use only one RAID utility to configure and manage storage. Installing the Storage Management

service on a system that has native RAID utilities or RAID utilities provided by vendors is not supported.

- * The Storage Management service enables you to perform storage tasks that are data-destructive. The Storage Management service should be used by experienced storage administrators who are familiar with their storage environment.

Fixed Issues/defects

Not Applicable.

Known issues and Workarounds

The following sections describe known problems associated with Storage Management or the supported controllers.

- * If a CacheCade drive is imported as part of a foreign configuration, verify the state of the drive as it may have been imported as a 'regular' RAID 0 volume and not a CacheCade drive. CacheCade will need to be reconfigured.
- * Dell OpenManage Server Administrator Storage Management 3.3 does not support PERC 4 controllers and earlier versions on VMware ESX4.x/ESXi 4.x and all 64-bit Linux Operating Systems.
- * Hot removal of enclosure is not supported in Storage Management. It may result in unpredictable errors, such as stopping Storage Management service.
- * Creating many sliced span virtual disks using the spun-down drives in the command line or GUI may result in unexpected result.

Workaround: After creating one sliced span virtual disk, wait for some time to create the next sliced span virtual disk.

- * In ESX4 Classic, 'deprecated SCSI ioctl' message is displayed on the console

Problem: In VMware ESX 4.0 Classic system, the following warning message(s) is displayed on the console:
"Program dsm_sa_datamgrd is using the deprecated SCSI ioctl, Please convert it to SG_IO." This is a kernel warning message displayed when storage operations are in progress. This is only a deprecation warning and not an indication of a failing operation.

Workaround: Reduce the kernel logging level.

By default, VMware ESX kernel logging level is set to '6' to print all the kernel messages with severity higher than 'information.' Reduce it to '4', so that messages with severity, 'error,' and above get printed to the console.

To do this, execute the following command as a 'root' user:
/proc/sys/kernel/printk.

- * A Security Key Identifier can contain numerals, lowercase alphabets, uppercase alphabets, non-alphanumeric characters (except space), or a combination of any of these.
Note: If you have used the special characters "/" (forward slash) or "'" (single quote) in the Security Key Identifier, they are displayed as "_" (underscore) on the Change Security Key page and Import Secured Foreign Configurations page.
This is applicable only to the Security Key Identifier and not to the Passphrase.
- * Storage Management does not support creating or importing of sliced spanned virtual disks on the controllers that do not supported PERC 7.1 firmware. You cannot create RAID 10, RAID 50, or RAID 60 in sliced manner.
If you create sliced spanned virtual disks using another application and attempt to import the same using Storage Management, the behavior cannot be predicted.
- * If Storage Management displays a path failure message for a Logical Connector after a reboot, use the "Clear Redundant Path View" provided in the "Change Controller Properties" controller task and restart the system.
NOTE: Use this command only if you have intentionally removed the multipath connection during reboot of the system.
- * In the VMware ESX 3.5 and ESX 4.0 environment, when you create a virtual disk using Storage Management, you may see an error message "The task failed to complete : The create virtual disk task was successful but the operating system may not be aware of the new virtual disk." However, the virtual disk is available for all operations on rebooting of the system.
- * On VMware ESX4 Classic and embedded operating systems, after creating a new virtual disk, the device name does not appear. In this case, the operating system is not aware of the newly created virtual disk. To avoid this issue, refresh the browser or reboot the server after creating the virtual disk.
- * Patrol Read is not supported on SSD media. The Patrol Read feature will fail for any controller that has SSD media on a virtual disk.
- * Hotplug of enclosures takes time to enumerate the enclosure and its components. During this time, there is a delay in the response time of tasks, such as displaying the physical disks on the physical disk page and in the virtual disk selection page.
- * All virtual disks from the SAS/iR controller display the name "IR Virtual Disk" on the "Preview" page. On successful import,

another name is assigned to these virtual disks and the "IR Virtual Disk" name is not displayed on the "Preview" page.

- * Storage Management supports assignment of only one dedicated hot spare for a virtual disk on SCSI Controllers.
- * Storage Management does not permit connecting the first enclosure in single path and attaching the subsequent enclosures in multipath. All enclosures must be connected in multipath to enable the multipath view.
- * An error message may not display when "Import Foreign Configuration" task is not successful.

Problem: The "Import Foreign Configuration" task can only import virtual disks that have consistent data. A virtual disk with inconsistent data cannot be imported. When importing multiple virtual disks in a single operation, however, the "Import Foreign Configuration" task may report successful completion even when inconsistent virtual disks are present and have not been imported successfully.

Solution: If the "Import Foreign Configuration" task is unable to import an inconsistent virtual disk, then the physical disks that belong to the virtual disk continue to display a "Foreign" state after the "Import Foreign Configuration" task completes. In this case, repeat the "Import Foreign Configuration" task until one of the following occurs:

- There are no longer any physical disks in "Foreign" state after the "Import Foreign Configuration" task completes.
 - You receive an error stating that the "Import Foreign Configuration" task has not completed successfully. This error indicates that there are no longer any consistent virtual disks available to be imported. Therefore, all unimported virtual disks are inconsistent and you can either perform a "Clear Foreign Configuration" to remove the virtual disks or remove the physical disks from the controller.
- * On a SAS 6/iR, using the command line interface (CLI) to clear a foreign configuration displays an error message. (154604)

Problem: When using the following command on a SAS 6/iR controller:

```
omconfig storage controller action=clearforeignconfig controller=id
```

a "failure" error message may display even though the command has completed successfully.

Solution: Verify that the "Clear Foreign Configuration" task completed successfully by using the Storage Management graphical user interface (GUI):

1. Expand the SAS 6/iR controller object in the tree view.
2. Select the "Physical Disks" object display under the SAS 6/iR controller object.

3. View the "Information/Configuration" tab and verify that none of the physical disks display a "Foreign" state.

- * Slot ID for a PERC 5/E Adapter may display as "Slot Not Available" on the Storage object "Information/Configuration" tab. (156528)

Problem: When using a PERC 5/E Adapter on a Windows 2000 Server system, the Slot ID property on the Storage object "Information/Configuration" tab may display as "Slot Not Available."

Solution: If "Slot Not Available" is displayed, you may be able to identify the slot ID by selecting the "System"-> "Main System Chassis"-> "Slots" object in the tree view and displaying the "Information" tab. The "Slot ID" property on this tab may display the correct information.

- * Incompatible physical disks attached to a SAS 5/iR controller may not display correct physical disk IDs in the Storage Management user interface. (75371)

Problem: You may notice that Storage Management reports incorrect physical disk IDs after attaching an incompatible physical disk to a SAS 5/iR controller. A physical disk is incompatible if it is too small for the existing virtual disk configuration or if it is using an incompatible technology. For example, if a virtual disk is using SAS physical disks, then a SATA physical disk is incompatible.

If the Storage Management service is running and you insert an incompatible physical disk, Storage Management assumes the disk is using SCSI technology and reports the disk ID in a 0:0 format. The physical disk ID for SAS and SATA disks is normally in a 0:0:0 format when the physical disks are connected to the SAS 5/iR controller through a backplane.

If Storage Management is restarted after you insert an incompatible physical disk, then Storage Management does not display the physical disk at all.

This behavior applies to the Storage Management graphical and command line interfaces.

Solution: Inserting a physical disk that is incompatible is an unsupported configuration. When inserting or replacing a physical disk, ensure the new disk meets the size and technology requirements.

- * Storage Management responds slowly when using Internet Explorer 6.x on a system with mixed SAS and SATA physical disks. (60696)

Problem: When using the "Create Virtual Disk" wizard from the Storage Management graphical user interface (GUI), you may notice decreased performance when using Internet Explorer 6.x on a system with multiple Dell PowerVault(TM) MD1000 storage enclosures that are heavily populated with mixed SAS and SATA physical disks.

Solution: Use a supported browser other than Internet Explorer 6.x or use the Storage Management command line interface (CLI) to create the virtual disk. See the Server Administrator readme for information on supported browsers. See the Storage Management online help or the "Server Administrator Command Line Interface User's Guide" for information on using the Storage Management CLI.

- * The system may require an extended period of time to boot when a tape device is attached without a driver. (35823)

Problem: Storage Management performs a discovery process for all attached devices when the system boots. The discovery process may take an extended period of time if the system has a tape device with no driver or an unsupported driver attached. When this occurs, the system requires a period of time in excess of ten minutes to complete the boot process.

Solution: Either detach the tape device from the system or install a supported version of the tape driver.

- * Storage Management may not display controllers installed with the Service and Diagnostics utility. (152362)

Problem: Storage Management may not recognize devices that are installed after Storage Management is already running.

Solution: If Storage Management does not recognize a newly-added device and this problem has not been corrected with a Global Rescan, then reboot the system.

- * Storage Management SNMP traps are not filtered by Server Administrator. (120475)

Problem: Server Administrator allows you to filter SNMP traps that you do not want to receive. To implement SNMP trap filtering, select the "System" tree-> "Alert Management" tab-> "SNMP Traps" subtab. The "SNMP Traps" subtab has options for enabling and disabling SNMP traps based on severity or the component that generates the trap. Even when the SNMP traps are disabled, Storage Management will generate SNMP traps.

Solution: SNMP trap filtering will be provided in a future release of Storage Management.

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Firmware for PERC 4/SC, 4/DC, 4e/DC, 4/Di,
4/IM, 4e/Si, 4e/Di, CERC ATA100/4ch, PERC 5/E, PERC 5/i Integrated,
PERC 5/i Adapter, SAS 5/iR Integrated, SAS 5/iR Adapter,
SAS 5/i Integrated, SAS 5/E Adapter, PERC 6/E Adapter,
PERC 6/i Integrated, PERC 6/i Adapter, SAS 6/iR Integrated,
SAS 6/iR Adapter, SAS 6/int. Modular, LSI 1020, LSI 1030,
PERC H800 Adapter, PERC H700 Integrated, PERC H700 Adapter,
PERC H700 Modular, PERC H200 Adapter, PERC H200 Integrated,
PERC H200 Modular and 6Gbps SAS HBA Controllers ***

| Controller | Firmware/ |

	BIOS
PERC 4/SC	352D
PERC 4/DC 32-bit	352D
PERC 4/DC 64-bit	352D
PERC 4e/DC	5B2D
PERC 4e/Si	5B2D
PERC 4e/Di	5B2D
PERC 4/Di on a 2-Processor 5U System-XP	252D
PERC 4/Di	422D
PERC 4/IM on an ES3005	1.00.12.00
PERC 4/IM on a 2 Processor 7U Modular System	1.03.23.90
PERC 5/E	5.2.2-0076
PERC 5/i Integrated	5.2.3-0074
PERC 5/i Adapter	5.2.3-0074

SAS 5/iR Integrated	00.10.51.00/ 06.12.05.00
SAS 5/iR Adapter	00.10.51.00/ 06.12.05.00
SAS 5/i Integrated	00.10.51.00/ 06.12.05.00
SAS 5/E Adapter	00.10.51.00/ 06.12.05.00
PERC 6/E Adapter	6.3.0-0001
PERC 6/i Integrated	6.3.0-0001
PERC 6/i Adapter	6.3.0-0001
SAS 6/iR Integrated	00.25.47.00/ 06.22.03.00
SAS 6/iR Adapter	00.25.47.00/ 06.22.03.00
SAS 6/int. Modular	00.25.47.00/ 06.22.03.00
PERC H800 Adapter	12.10.0-0025
PERC H700 Integrated	12.10.0-0025
PERC H700 Adapter	12.10.0-0025
PERC H700 Modular	12.10.0-0025
PERC H200	

Adapter	07.02.01.00
PERC H200 Integrated	07.02.01.00
PERC H200 Modular	07.02.01.00
6Gbps SAS HBA	07.02.01.00

*** Windows Drivers for PERC 4/SC, 4/DC, 4e/DC, 4/Di, 4/IM, 4e/Si, 4e/Di, CERC ATA100/4ch, PERC 5/E, PERC 5/i Integrated, PERC 5/i Adapter, SAS 5/iR Integrated, SAS 5/iR Adapter, SAS 5/i Integrated, SAS 5/E Adapter, PERC 6/E Adapter, PERC 6/i Integrated, PERC 6/i Adapter, SAS 6/iR Integrated, SAS 6/iR Adapter, SAS 6/int. Modular, LSI 1020, LSI 1030, PERC H800 Adapter, PERC H700 Integrated, PERC H700 Adapter, PERC H700 Modular, PERC H200 Adapter, PERC H200 Integrated, PERC H200 Modular and 6Gbps SAS HBA Controllers ***

Controller Windows	Windows 2000 Server	Windows Server	Windows Server	Windows Server	Windows Server	Windows Server
2008	32-bit Driver	2003 32-bit Driver	2003 64-bit Driver	2008 32-bit Driver		

PERC 4/SC Native	5.48	6.46.2.32	6.46.3.64	Native	
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PERC 4/DC Native 32-bit	5.48	6.46.2.32	6.46.3.64	Native	
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PERC 4/DC Native 64-bit	5.48	6.46.2.32	6.46.3.64	Native	
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PERC 4e/DC Native	5.48	6.46.2.32	6.46.3.64	Native	
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PERC 4e/Si Native	5.48	6.46.2.32	6.46.3.64	Native	
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PERC 4e/Di Native	5.48	6.46.2.32	6.46.3.64	Native	
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PERC 4/Di Native on a 2-Processor 5U System-XP	5.48	6.46.2.32	6.46.3.64	Native	
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PERC 4/Di Not on a Applicable PowerEdge 2600	5.48	6.46.2.32	6.46.3.64	Native	
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PERC 4/Di Native on a 2-Processor/	5.48	6.46.2.32	6.46.3.64	Native	
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5U System-XP					
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PERC 4/Di Not on a Applicable PowerEdge 1750	5.48	6.46.2.32	6.46.3.64	Native	
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PERC 4/IM Not on an Supported ES3005	1.08.06	Native	Not Applicable	Not Supported	
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PERC 4/IM Not on a Supported PowerEdge 1655MC	1.08.06	Native	Not Applicable	Not Supported	
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PERC 4/IM Native on a 2 processor/ 7U Modular System	1.09.11	1.09.11	Native (SP1) 1.09.11.53	Native	
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PERC 4/IM Native on a PowerEdge 1855	1.09.11	1.09.11	Native (SP1) 1.09.11.53	Native	
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CERC	5.46	6.41.2.32	6.41.2.32	Not	
Not ATA 100/4CH Supported				Supported	

PERC 5/E 2.24.0.64	2.14.0.32	2.24.0.32	2.24.0.64	2.24.0.32	
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PERC 5/i 2.24.0.64 Integrated	2.14.0.32	2.24.0.32	2.24.0.64	2.24.0.32	
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PERC 5/i 2.24.0.64 Adapter	2.14.0.32	2.24.0.32	2.24.0.64	2.24.0.32	
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SAS 5/iR 1.28.03.01 Integrated	1.24.04.40	1.28.03.01	1.28.03.01	1.28.03.01	
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SAS 5/iR 1.28.03.01 Adapter	1.24.04.40	1.28.03.01	1.28.03.01	1.28.03.01	
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SAS 5/i 1.28.03.01 Integrated	1.24.04.40	1.28.03.01	1.28.03.01	1.28.03.01	
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SAS 5/E 1.28.03.01 Adapter	1.24.04.40	1.28.03.01	1.28.03.01	1.28.03.01	
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PERC 6/E 2.24.0.64 Adapter	Not Supported	2.24.0.32	2.24.0.64	2.24.0.32	
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PERC 6/i 2.24.0.64 Integrated	Not Supported	2.24.0.32	2.24.0.64	2.24.0.32	
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PERC 6/i 2.24.0.64 Adapter	Not Supported	2.24.0.32	2.24.0.64	2.24.0.32	
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SAS 6/iR Integrated 1.28.03.01	Not Supported	1.28.03.01	1.28.03.01	1.28.03.01	
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SAS 6/iR Adapter 1.28.03.01	Not Supported	1.28.03.01	1.28.03.01	1.28.03.01	
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SAS 6/iR Modular 1.28.03.01	Not Supported	1.28.03.01	1.28.03.01	1.28.03.01	
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LSI 1020 on Not a PowerEdge Applicable 1600SC	1.09.11	1.09.11	1.09.11	Not Applicable	

LSI 1030 on Not a PowerEdge Applicable 1750	1.09.11	1.09.11	1.09.11	Not Applicable	

PERC H800 4.31.1.64 Adapter	Not Supported	4.31.1.32	4.31.1.64	4.31.1.32	

PERC H700 4.31.1.64 Integrated	Not Supported	4.31.1.32	4.31.1.64	4.31.1.32	

PERC H700 4.31.1.64 Adapter	Not Supported	4.31.1.32	4.31.1.64	4.31.1.32	

PERC H700 4.31.1.64 Modular	Not Supported	4.31.1.32	4.31.1.64	4.31.1.32	

PERC H200 2.0.12.10 Adapter	Not Supported	2.0.12.10	2.0.12.10	2.0.12.10	

PERC H200 2.0.12.10 Integrated	Not Supported	2.0.12.10	2.0.12.10	2.0.12.10	
PERC H200 2.0.12.10 Modular	Not Supported	2.0.12.10	2.0.12.10	2.0.12.10	
6Gbps SAS 2.0.12.10 HBA	Not Supported	2.0.12.10	2.0.12.10	2.0.12.10	

*** Linux Drivers for PERC 4/SC, 4/DC, 4e/DC, 4/Di, 4/IM, 4e/Si, 4e/Di, CERC ATA100/4ch, PERC 5/E, PERC 5/i Integrated, PERC 5/i Adapter, SAS 5/iR Integrated, SAS 5/iR Adapter, SAS 5/i Integrated, SAS 5/E Adapter, PERC 6/E Adapter, PERC 6/i Integrated, PERC 6/i Adapter, SAS 6/iR Integrated, SAS 6/iR Adapter, SAS 6/int. Modular, LSI 1020, LSI 1030, PERC H800 Adapter, PERC H700 Integrated, PERC H700 Adapter, PERC H700 Modular, PERC H200 Adapter, PERC H200 Integrated, PERC H200 Modular and 6Gbps SAS HBA Controllers ***

Controller	Red Hat Linux Driver 4.0	Red Hat Linux Driver 5.5	SUSE Linux 9 64-Bit Driver	SUSE Linux 10 64-bit Driver
PERC 4/SC	2.20.4.4	Native	Native	Not Applicable
PERC 4/DC 32-bit	2.20.4.4	Native	Native	Native
PERC 4/DC 64-bit	2.20.4.4	Native	Native	Native

PERC 4e/DC	2.20.4.4	Native	Native	Native
PERC 4e/Si	2.20.4.4	Native	Native	Not Applicable
PERC 4e/Di	2.20.4.4	Native	Native	Not Applicable
PERC 4/Di on a PowerEdge 2600/ on a 2-processor 5U System-XP	2.20.4.4	Native	Native	Not Applicable
PERC 4/Di on a PowerEdge 1750	2.20.4.4	Native	Native	Not Applicable
PERC 4/IM on a ES3005/ PowerEdge 1655MC	Not Applicable	Not Applicable	Native	Not Applicable
PERC 4/IM on a 2 Processor 7U Modular System	Native	Native	Native	Not Applicable
CERC ATA 100/4CH	2.10.1	2.20.4.4	Native	Not Applicable
PERC 5/E	00.00.03.21-6	00.00.04.31	00.00.03.21-6	00.00.04.29
PERC 5/i Integrated	00.00.03.21-6	00.00.04.31	00.00.03.21-6	00.00.04.29
PERC 5/i Adapter	00.00.03.21-6	00.00.04.31	00.00.03.21-6	00.00.04.29
SAS 5/iR Integrated	3.12.29.00-6	Native	3.12.29.00-6	Native
SAS 5/iR	3.12.29.00-6	Native	3.12.29.00-6	Native

Adapter					
SAS 5/i Integrated	3.12.29.00-6	Native	3.12.29.00-6	Native	
SAS 5/E Adapter	3.12.29.00-6	Native	3.12.29.00-6	Native	
PERC 6/E Adapter	Not supported	00.00.04.31	00.00.03.21-6	00.00.04.29	
PERC 6/i Integrated	Not supported	00.00.04.31	00.00.03.21-6	00.00.04.29	
PERC 6/i Adapter	Not supported	00.00.04.31	00.00.03.21-6	00.00.04.29	
SAS 6/iR Integrated	Not supported	Native	3.12.29.00-6	4.00.38.02-3	
SAS 6/iR Adapter	Not supported	Native	3.12.29.00-6	4.00.38.02-3	
SAS 6/int. Modular	Not supported	Native	3.12.29.00-6	4.00.38.02-3	
LSI 1020 on a PowerEdge 1600SC	2.05.11.03	Native	Not Applicable	Not Applicable	
LSI 1030 on a PowerEdge 1750	2.05.11.03	Native	Not Applicable	Not Applicable	
PERC H800 Adapter	00.00.04.27	00.00.04.31	Not Supported	00.00.04.27	
PERC H700 Integrated	00.00.04.27	00.00.04.31	Not Supported	00.00.04.29	
PERC H700 Adapter	00.00.04.27	00.00.04.31	Not Supported	00.00.04.29	
PERC H700 Modular	00.00.04.27	00.00.04.31	Not Supported	00.00.04.29	

PERC H200 Adapter	02.00.02.00	07.00.01.00	Not Supported	07.00.01.00
PERC H200 Integrated	02.00.02.00	07.00.01.00	Not Supported	07.00.01.00
PERC H200 Modular	02.00.02.00	07.00.01.00	Not Supported	07.00.01.00
6Gbps SAS HBA	02.00.02.00	07.00.01.00	Not Supported	07.00.01.00

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PREREQUISITE DRIVERS AND FIRMWARE

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On a system that does not meet the driver and firmware requirements, controllers and their features are not displayed by Storage Management. At Storage Management runtime, you can determine whether the system meets the firmware requirements by checking your application log files for notifications on outdated firmware. On SCSI controllers, Storage Management displays the firmware version at runtime. On SAS controllers, Storage Management displays both the firmware and the driver version at runtime.

Corrected Problems

The following problems were reported in the 3.5 A00 version and have been corrected in this release:

DF457031: The firmware version check fails only on the new supported platforms (Dell PowerEdge R210 II and Dell PowerEdge T110 II) using S100 Software Raid and alert 2166 is reported.

Global Support

For information on technical support, visit www.dell.com/contactus.

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