Dell OpenManage
Server Administrator
Version 6.4

Command Line
Interface Guide

Notes and Cautions

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

CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.

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Introduction

You can perform essential systems management tasks using Dell OpenManage Server Administrator's graphical user interface (GUI) or the command line interface (CLI).

The reporting and viewing features allow retrieval of overall health status for systems on your network. At the component level, you can view information about voltage, temperature, fan's revolutions per minute (RPM), memory functioning, and many other critical component details. You can see a detailed account of cost of ownership (COO) facts about your system in a summary view. You can retrieve version information for BIOS, firmware, operating system, and all installed software is easy to retrieve.

OpenManage Server Administrator supports:

- Displaying and configuring BIOS settings for all supported platforms
- Latest version of vendor libraries
- Configuring boot order and adding or removing devices from the boot list using CLI
- SHA 256 certificate authentication
- Installing OMSA on Linux with specific packages, according to its distribution, version, or architecture
- Trusted Cryptographic Module (TCM)
- Power management of physical disks attached to the controller
- Writing the encryption parameters of the controller
- Displaying vFlash type and available size in vFlash media details
- Displaying Network Interface Controller (NIC) Team interface properties in **omreport chassis** command
- Displaying slot details in **omreport controller** command

Configuration features allow Server Administrator to perform essential tasks described in detail in the following sections. This CLI guide documents all the commands that apply to Server Administrator and Storage Management.

> **NOTE:** You can use the CLI instead of the Server Administrator home page, and turn the Server Administrator Web server off if you have encryption concerns. The CLI does not use the Web server. Use the **omconfig system webserver action=stop** command to turn off the Web server. The Web server starts automatically after a reboot, so this command must be issued each time a system starts up. See "omconfig system webserver/omconfig servermodule webserver" on page 146 for more information.

> **NOTE:** After installing the Dell OpenManage Server Administrator, ensure that you log out and log in to reset the path to access Dell OpenManage CLI utilities.

> **NOTE:** For information on terms used in this document, see the *Glossary* on the Dell support website.

What's New in Version 6.4

OpenManage Server Administrator 6.4 supports:

- Express Service Code, a mathematical conversion of the System Service Tag to a numeric format allowing easy entry to automated call-routing system of Dell
- Additional storage controller command — cachecade
- All platforms released after OpenManage Server Administrator version 6.3
- Greater than 2 TB Serial-Attached SCSI (SAS) and Serial Advanced Technology Attachment (SATA) drives

> **NOTE:** For the supported operating systems list, see the *Dell Systems Software Support Matrix*. To access this document, go to **support.dell.com/manuals**, click **Software**, and select your product.

> **NOTE:** CLI commands are not supported on systems with VMware ESXi operating system.

Using CLI Commands From Windows Command Prompts

If you are running the Microsoft Windows operating system, use the 32-bit command prompt to issue a Server Administrator CLI command. You can access the 32-bit command prompt using one of the following methods:

- Click the **Start**→ **Programs**→ **Accessories**→ **Command Prompt**
- Click **Start**→ **Run** and type cmd.exe

NOTE: Do not type command into the **Run** dialog box to launch a command line window; this activates the MS-DOS emulator **command.com,** which has environment variable limitations that can cause subtle problems with the CLI.

Primary CLI Commands

The commands that carry out the functions of Server Administrator are:

- **omconfig**
- **omhelp**
- **omreport**

The **omconfig** command writes values that you assign to an object's properties. You can specify values for warning thresholds on components or prescribe what action your system is to take when a certain warning or failure event occurs. You can also use the **omconfig** command to assign specific values to your system's asset information parameters, such as the purchase price of the system, the system's asset tag, or the system's location.

The **omhelp** command displays short text help for CLI commands. The shorthand equivalent of **omhelp** is the command for which you want help followed by **-?**. For example, to display help for the **omreport** command, type one of the following commands:

```
omhelp omreport

omreport -?
```

The **omreport** command produces reports of your system's management information.

NOTE: For an overall summary of CLI commands, type omhelp.

Table 1-1 lists the primary CLI commands used by Server Administrator. This guide contains a section for each primary command.

Table 1-1.   CLI Commands and Sections in This Guide

Primary CLI Command	Section Title	Related Sections
omconfig	"omconfig: Managing Components Using the Instrumentation Service" on page 81	"omconfig system or servermodule assetinfo: Editing Cost of Ownership Values" on page 153
omhelp	"Using the omhelp Command" on page 23	
omreport	"omreport: Viewing System Status Using the Instrumentation Service" on page 27	

NOTE: omupdate commands are no longer supported in Server Administrator and are replaced by Dell Update Package or Server Update Utility commands. To update the different components, download the Dell Update Package and run *<package name>*/**s [/f]**. See the *Dell Update Packages for Microsoft Windows Operating Systems User's Guide*, the *Dell Update Packages for Linux User's Guide*, or the *Server Update Utility User's Guide* on the Dell Support website at **support.dell.com/manuals** for more information on corresponding CLI syntax.

Additional useful topics about the CLI include:

- "Working With CLI Command Results" on page 261

CLI Error Checking and Error Messages

When you type CLI commands, the CLI checks these commands for correct syntax. If you type a command and the command is executed successfully, a message displays, stating that your command has been successful.

Success Messages

When you type a successful **omconfig** command, data for that component displays.

The following **omconfig** command examples displays valid CLI commands and their success messages:

Command:

```
omconfig chassis temps index=0 warnthresh=default
```

Message:

```
Temperature probe warning threshold value(s) set
successfully.
```

Command:

```
omconfig chassis biossetup attribute=numlock
setting=on
```

Message:

```
BIOS setup configured successfully. Change will
take effect after the next reboot.
```

Command:

```
omconfig system assetinfo info=depreciation
duration=6
```

Message:

```
Asset information set successfully.
```

Failure Messages

CLI failure messages provide reasons why some commands do not succeed. Some common reasons why commands fail include syntax errors and components that are not present. Many error messages provide syntax information that you can use to execute the command successfully.

If you try to execute a command for a component or feature not present in your system configuration, the error message states that the component is not present.

Command:

```
omconfig chassis volts index=3 minwarnthresh=
3.3000
```

Example message:

```
Error! Number with up to 3 digits after decimal
point expected, read 3.3000

The value given by the command specifies more than
3 digits after the decimal point. A valid minimum
warning threshold value for volts contains up to
3 digits after the decimal point.
```

Type:

```
omconfig chassis volts index=3 minwarnthresh=3.300
```

When you type the revised command with three decimal points, you receive another error message:

```
Error! This voltage probe min warning threshold
must be between 11.400 and 12.480.
```

Revised command:

```
omconfig chassis volts index=3 minwarnthresh=
11.500
```

Message:

```
Voltage probe warning threshold(s) set
successfully.
```

Scripting and Comparing With the CLI

The Server Administrator CLI allows administrators to write batch programs or scripts to be executed by the operating system. For an enterprise with many systems, an administrator could write a configuration script that specified the warning thresholds for each major component of a system and also specified a set of actions that the administrator wants each system to take in case of a warning or failure event. In the most critical cases, the administrator could write a script so that the system shuts down to prevent damage. The administrator could then distribute and execute the script to many managed systems at the same time. Such a scenario facilitates configuring any number of new systems acquired by a company and makes implementation of new system administration policies easier across many existing systems that require reconfiguration.

A similar scenario could be used to populate a large number of newly acquired systems with detailed asset information. Much of the information would be the same, such as the manufacturer or lessor of the system, whether support for the system is outsourced, insurance company name of the system, method of depreciation, and so on. Any variable that is common to all systems could be scripted, sent to all managed systems, and executed. Asset information that is unique to a system could be scripted as a group and sent to that managed node for execution. For example, a script could specify values for all unique variables such as owner, primary user phone number, asset tag, and so on. Scripts to populate unique values would set all unique variables at once rather than one by one through the system's command line.

In many cases, the CLI allows a user with a very well-defined task in mind to retrieve information about the system rapidly. If a user wants to review a comprehensive summary of all system components and save that summary information to a file for comparison with later system states, the CLI is ideal.

Using CLI commands, administrators can write batch programs or scripts to execute at specific times. When these programs execute, they can capture reports on components of interest, such as fan RPMs during periods of high system usage compared with the same measurements at times of lowest system usage. Command results can be routed to a file for later analysis. Reports can help administrators gain information that can be used to adjust usage patterns, to justify purchasing new system resources, or to focus on the health of a problem component.

Command Syntax Overview

Commands vary in complexity. The simplest command has only command level 1. The **omhelp** command is a simple command. When you type `omhelp`, a list of the main CLI commands is displayed.

The next level of complexity includes commands that contain command levels 1 and 2. All of the **about** commands are examples of command level 2 complexity. The **omconfig about** and **omreport about** commands cause a very brief summary to display. The summary shows version information for the systems management software installed on your system; for example, Server Administrator 1.x.

Some commands have command level 1 and command level 2 and one name=value pair. Consider the following example command that instructs Server Administrator for more details about the environment for Server Administrator:

```
omreport about details=true
```

Command level 1 is **omreport**, command level 2 is **about**, and the name=value pair is **details=true.**

Many commands use command level 1, command level 2, and command level 3, but do not require any parameters (name=value pairs). Most **omreport** commands are of this type. For example:

```
omreport system alertaction
```

causes a list of alert actions that are configured for components on your system to be displayed.

The most complex commands have all three command levels and can have multiple name=value pairs. An example of two name=value pairs:

```
omconfig system assetinfo info=depreciation
duration=3
```

An example of nine name=value pairs:

```
omconfig system assetinfo info=acquisition
purchasecost=<n> waybill=<n> installdate=<mmddyy>
purchasedate=<mmddyy> ponum=<n> signauth=<text>
expensed=<yes | no> costcenter=<text>
```

In each section, command syntax and other information about commands is formatted with any of the following fields that apply:

command level 1	command level 2	command level 3	name=value pair 1	name=value pair 2

2

Using the omhelp Command

The **omhelp** command and its equivalent, *<command>* **-?**, accesses the detailed help text interface of Command Line Interface (CLI). You can get help at several levels of detail.

Each fully qualified CLI command may have a variable number of distinct parts: the command (command level 1), one or more subcommands (command level 2 and command level 3, if present), and one or more name= value pair(s).

By appending **-?** (space-dash-question mark) to any command, you can get help for that command.

Example Help Commands

When you type `omconfig -?`, you get general help about the **omconfig** command. The help at this level lists the available subcommands for **omconfig**:

- about
- preferences
- chassis
- system

When you type `omconfig system -?`, CLI help lists all the subcommands available for **omconfig system**:

- alertaction
- alertlog
- assetinfo
- cmdlog
- esmlog
- events
- platformevents
- pedestinations

- recovery
- shutdown
- thrmshutdown
- webserver

Figure 2-1 shows the levels of help for a command.

Figure 2-1.   Different Levels of Help for a Command
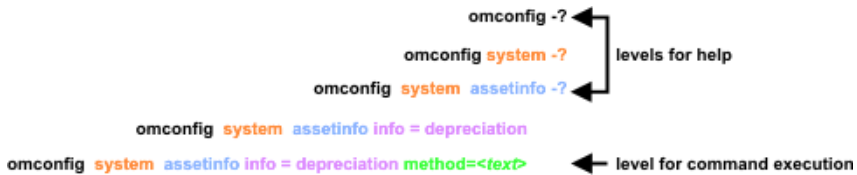
You can also parse the **omconfig system assetinfo** command as follows:

```
<command level 1 command level 2 command level 3>
<name=value pair 1> [name=value pair 2]
```

where command levels 1, 2, and 3 are represented by **omconfig system assetinfo**, name=value pair 1 is represented by **info=depreciation**, and name=value pair 2 is represented by **method=straightline**.

To set your depreciation method to straight line, type:

```
omconfig system assetinfo info=depreciation
method=straightline
```

The CLI responds with the following message:

```
Asset information set successfully.
```

When you type omconfig system assetinfo -?, the help that displays provides information about assigning values for the name and option fields. Partial results for the request **omconfig system assetinfo -?** are as follows:

```
assetinfo              Set asset information.
```

For one info value, specify one or more optional parameter(s).

Table 2-1 displays the optional parameters for **info=acquisition**:

Table 2-1.   Optional Parameters

Info Value	Optional parameters
Info=acquisition	purchasecost=<num> waybill=<num> installdate=<mmddyy> purchasedate=<mmddyy> ponum=<num> signauth=<text> expensed=<yes|no> costcenter=<text> info=depreciation method=<text> duration=<num> percent=<percent> unit=<months|years|unknown>

3

omreport: Viewing System Status Using the Instrumentation Service

The **omreport** command allows you to see detailed information about your system components. You can retrieve summaries for many system components at one time, or you can get details about a specific component. This chapter shows you how to get reports with the level of detail that you want.

Commands documented in this chapter vary in whether they define the fields that appear in the results of a particular **omreport** command. Fields are defined only if they have a special or less familiar use.

As with all other components, you can use **omreport** to *view* component status, and **omconfig** to *manage* a component. For information on configuring components for management, see "omconfig: Managing Components Using the Instrumentation Service" on page 81.

You can use **omreport** commands to get information you need to execute an **omconfig** command. For example, if you want to edit the minimum temperature for a warning event on a temperature probe, you need to know the index of the probe you want to configure. You can use **omreport chassis temps** to display a list of probes and their indexes.

Table 3-1.   System Availability for the omreport Command

Command Level 1	Command Level 2	Applicable To
omreport	modularenclosure	Modular system
	servermodule	Modular system
	mainsystem	Modular system
	system	Non-modular system
	chassis	Non-modular system
	preferences	Modular/Non-modular system

Conventions for Parameter Tables

When listing the parameters that a command can take, the parameters are listed in alphabetical order instead of the order in which they appear in the command line interface.

The symbol |, often called *pipe*, is the logical *exclusive or* operator. For example, enable | disable means that you can enable or disable the component or feature, but you cannot simultaneously enable and disable the component or feature.

Command Summary of the omreport Command

🖉 **NOTE:** Although this chapter lists all possible **omreport** commands, the commands available on your system depend on your system configuration. The results of the **omreport** command vary from one system to another. Data displays for installed components only.

🖉 **NOTE:** When a system includes an external chassis, the displayed results vary by operating system. On SUSE Linux Enterprise Server and Red Hat Enterprise Linux systems, **omreport** commands display external chassis information in a separate section after the main chassis information. On Microsoft Windows systems, data about the external chassis does not appear in the **omreport** output.

Table 3-2 is a high-level summary of the **omreport** command. The column titled "Command level 1" shows the **omreport** command at its most general. "Command level 2" shows the major objects or components that you can view using **omreport** (about, chassis, storage, and system). "Command level 3" lists the specific objects and components for which you can view reports. "User privilege required" refers to the type of privilege you need to perform the command, where U=User, P=Power User, and A=Administrator. "Use" is a very general statement about the actions that can be performed using **omreport**. More details about syntax and use of the command appear later in this section.

Table 3-2 displays the **omreport** commands available for about, system, and main system chassis. For information about viewing storage components, see "omreport: Viewing System Status Using the Instrumentation Service" on page 27.

Table 3-2. Command Level 1, Level 2, and Level 3 for omreport

Command Level 1	Command Level 2	Command Level 3	User Privilege Required	Use
omreport				
	modularenclosure		U, P, A	Shows information for all the modular chassis.
	about		U, P, A	Shows version number and properties for Server Administrator.
		details=true	U, P, A	Displays information for all the Server Administrator programs installed.
	chassis/mainsystem		U, P, A	Shows the general status of all the main components.
		acswitch	U, P, A	Shows failover settings where redundant AC power lines are supported in a system.
		batteries	U, P, A	Shows the properties set for batteries.
		bios	U, P, A	Shows BIOS information such as manufacturer, version, and release date.
		biossetup	A	Shows BIOS setup properties configured during system boot.

Table 3-2. Command Level 1, Level 2, and Level 3 for omreport *(continued)*

Command Level 1	Command Level 2	Command Level 3	User Privilege Required	Use
		fans	U, P, A	Shows the status and thresholds for system fans.
		firmware	U, P, A	Shows the name and version of the firmware.
		frontpanel	U, P, A	Shows whether the front panel button settings, such as the **Power** button and/or **Nonmasking Interrupt** (NMI) button (if present on the system), are enabled or disabled. It also displays the front panel encryption access information and the front panel LCD information.
		fru	U, P, A	Shows the Field Replaceable Unit (FRU) information.
		hwperformance	U, P, A	Shows the status and cause for the system's performance degradation.
		info	U, P, A	Shows a status summary for main system chassis components.
		intrusion	U, P, A	Shows the status of the system's intrusion sensor(s).

Table 3-2.   Command Level 1, Level 2, and Level 3 for omreport *(continued)*

Command Level 1	Command Level 2	Command Level 3	User Privilege Required	Use
		leds	U, P, A	Shows the properties you have set for light-emitting diodes to flash under various alert conditions.
		memory	U, P, A	Shows properties of your system's memory arrays.
		nics	U, P, A	Shows the NIC and Team interface properties.
		ports	U, P, A	Shows the properties for your system's parallel and serial ports, such as I/O address, IRQ level, connector type, and maximum speed.
		processors	U, P, A	Shows properties of your system's processors, including speed, manufacturer, and processor family.
		pwrmanagement	U, P, A	Shows power inventory details such as system idle power, system maximum potential power, and power budget information.
		pwrmonitoring	U, P, A	Shows properties of power consumption.
		pwrsupplies	U, P, A	Shows properties of power supplies.

Table 3-2.   Command Level 1, Level 2, and Level 3 for omreport *(continued)*

Command Level 1	Command Level 2	Command Level 3	User Privilege Required	Use
		remoteaccess	U, P, A	Shows general information on remote access.
		slots	U, P, A	Shows properties of your system's expansion slots and other slot types.
		temps	U, P, A	Shows the status and thresholds for the system temperature sensors.
		volts	U, P, A	Shows the status and thresholds for the system voltage sensors.
		removableflashmedia	U, P, A	Shows the system's virtual flash (vFlash) and secure digital (SD) card details.
	storage		U, P, A	See "Using the Storage Management Service" on page 171.
	system/servermodule		U, P, A	Shows a high-level summary of system components.
		alertaction	U, P, A	Shows warning and failure threshold values, as well as actions configured when an essential component detects a warning or failure state.

Table 3-2.   Command Level 1, Level 2, and Level 3 for omreport *(continued)*

Command Level 1	Command Level 2	Command Level 3	User Privilege Required	Use
		alertlog	U, P, A	Allows the administrator to display the alert log.
		assetinfo	U, P, A	Shows the cost of ownership information for your system.
		cmdlog	U, P, A	Allows the administrator to display the command log.
		esmlog	U, P, A	Allows the administrator to display the hardware log.
		events	U, P, A	Shows the system's Simple Network Management Protocol (SNMP) event settings.
		operatingsystem	U, P, A	Shows the name and version of your operating system.
		pedestinations	U, P, A	Shows destinations where alerts for platform events are configured to be sent.
		platformevents	U, P, A	Shows the system's response for each listed platform event.

Table 3-2.   Command Level 1, Level 2, and Level 3 for omreport *(continued)*

Command Level 1	Command Level 2	Command Level 3	User Privilege Required	Use
		recovery	P, A	Shows how your system is configured to respond to a hung operating system.
		shutdown	P, A	Shows how the shutdown action is to be performed.
		summary	U, P, A	Shows the key facts for all system components, including main system chassis, software, and storage.
		thrmshutdown	P, A	Shows the shutdown action, if any, to be taken when a temperature warning or failure condition is detected.
		version	U, P, A	Shows a summary for all updatable components on your system.
	preferences	webserver	U, P, A	Shows the URL information of your Server Administrator Web server.

Help With the omreport Command

Use the **omreport -?** command to get a list of the available commands for **omreport**.

Use **omreport** *<command level 2> -?* to get help on the level 2 about, chassis, and system commands. The following information on **omreport system -?** also applies to get help for the **omreport chassis** command.

To see a list of valid commands for **omreport system**, type:

```
omreport system -? | more
```

omreport modularenclosure

Use the **omreport modularenclosure** command to view details of the modular system. Type:

```
omreport modularenclosure
```

NOTE: This CLI command is available when Dell OpenManage Server Administrator is installed on Dell modular systems.

Server Administrator displays information related to the modular enclosure and chassis management controller CMC (if available):

NOTE: The output varies depending on the configuration of your system..

```
Modular Chassis Information
Chassis Information
Attribute     : Model
Value         : Modular Server Enclosure
Attribute     : Lock
Value         : true
Attribute     : Service Tag
Value         : 8RLNB1S
Attribute     : Express Service Code
Value         : 18955029124
CMC Information
```

```
Attribute       : Product
Value           : Chassis Management Controller (CMC)
Attribute       : Description
Value           : The system component provides a
                  complete set of remote management
                  functions for Dell systems.
Attribute       : Version
Value           : 3.20
Attribute       : IP Address
Value           : 101.102.103.104
Attribute       : IP Address Source
Value           : Dynamic Source
Attribute       : IP Address Type
Value           : IPv4
Attribute       : Remote Connect Interface
Value           : Launch CMC Web Interface
```

omreport about

Use the **omreport about** command to learn the product name and version number of the systems management application installed on your system. The following is an example output from the **omreport about** command:

```
Product name :Dell OpenManage Server Administrator
Version      :6.x.x
Copyright    :Copyright (C) Dell Inc. 1995-2010. All
              rights reserved.
Company      :Dell Inc.
```

For details about the environment for Server Administrator, type:

```
    omreport about details=true
```

Server Administrator includes a number of services, each of which has a version number of its own. The **Contains** field reports version numbers for the services as well as other useful details. The output below is an example, and can change depending on your system's configuration and the version of Server Administrator installed on your system:

```
Contains: Instrumentation Service 6.x.x
          Storage Management Service 2.x.x
          Sun JRE - OEM Installed Version 1.x.x
          Secure Port Server 3.x.x
          Core Service 1.x.x
          Instrumentation Service Integration Layer
          1.x.x
          Storage Management Service Integration
          Layer 1.x.x
          Server Administrator 6.x.x
```

omreport chassis/omreport mainsystem Commands

Use the **omreport chassis** or **omreport mainsystem** commands to view details for the entire chassis or for a particular component.

omreport chassis/ omreport mainsystem

Type:

```
omreport chassis
or
omreport mainsystem
```

Server Administrator displays a general status for your main system chassis/main system components.

```
SEVERITY   : COMPONENT
Ok         : Fans
Critical   : Intrusion
Ok         : Memory
Ok         : Power Supplies
Ok         : Temperatures
Ok         : Voltages
```

omreport chassis acswitch/omreport mainsystem acswitch

Use the **omreport chassis acswitch or omreport mainsystem acswitch** command if your system has redundant AC power lines that are configured in a failover arrangement. Type:

```
omreport chassis acswitch
or
omreport mainsystem acswitch
```

Server Administrator displays the following output:

```
AC Failover Switch
AC Switch Redundancy
Redundancy Status      : Full
Number of devices      : 2
required for full
redundancy
Redundancy Mode        :
Redundancy             : Input Source Line 1, upon
Configuration            redundancy restoration,
                         return to Line 1
AC Power Lines
Status                 : Ok
Location               : AC Power Line 1
AC Present             : Power Present
Active Source          : Active
Status                 : Ok
```

```
Location                  : AC Power Line 2
AC Present                : Power Present
Active Source             : Not Active
```

Server Administrator reports values for the **Redundancy Status** and
Redundancy Mode fields.

omreport chassis batteries/omreport mainsystem batteries

Use the **omreport chassis batteries** or **omreport mainsystem batteries**
command to view battery properties. Type:

```
omreport chassis batteries
or
omreport mainsystem batteries
```

Server Administrator displays the summary of the battery information for
your system.

omreport chassis bios/omreport mainsystem bios

Use the **omreport chassis bios/omreport mainsystem bios** command to view
the current BIOS information. Type:

```
omreport chassis bios
or
omreport mainsystem bios
```

Server Administrator displays the summary of the BIOS information for
your system.

omreport chassis biossetup/omreport mainsystem biossetup

Use the **omreport chassis biossetup** or **omreport mainsystem biossetup**
command to view BIOS setup parameters that are normally available only
during system boot. Type:

```
omreport chassis biossetup
or
omreport mainsystem biossetup
```

NOTE: To maintain consistency across the commands, the output format of this
command has changed. So, you may have to change the user scripts as applicable.

Table 3-3 displays the available BIOS setup parameters:

NOTE: All the BIOS Setup parameters are not displayed. Only those BIOS setup properties configured during system boot are displayed.

Table 3-3. BIOS Setup Parameters

Parameters	Description
Attribute	
Bootsequence	Displays the device used to boot the system.
Numlock	Displays whether the keypad can be used as number keys.
Embedded Video Controller	Displays whether the Embedded Video Controller option is enabled or disabled.
Boot Mode	Displays whether the boot mode is configured to BIOS or Unified Extensible Firmware Interface (UEFI).
Processor C1-E	Displays the Processor C1-E status.
CPU Execute Disable	Displays whether the Execute Disable (XD) option is enabled or disabled.
Processor C State Control	Displays whether the Processor C State Control option is enabled or disabled.
Processor CMP	Displays the number of cores enabled per processor.
User accessible USB Ports	Displays whether the user-accessible USB port is enabled or disabled.
CPU Virtualization Technology	Displays the additional hardware capabilities provided by Virtualization Technology.
AC Power Recovery Mode	Displays the system state when input power is restored after an outage.
Embedded SATA Controller	Displays whether the embedded SATA controller is set to ATA mode, RAID mode, or is disabled.
SATA port 0	Displays the state of SATA port 0.
SATA Port 1	Displays the state of SATA port 1.
Dual NIC (1/2)	Displays whether NIC 1 and NIC 2 with PXE/iSCSI is enabled or disabled.
Dual NIC (3/4)	Displays whether NIC 3and NIC 4 with PXE/iSCSI is enabled or disabled.

Table 3-3.   BIOS Setup Parameters *(continued)*

Parameters	Description
NIC 1	Displays whether the first NIC is enabled (with or without PXE/iSCSI) or disabled during system boot.
NIC 2	Displays whether the second NIC is enabled (with or without PXE/iSCSI) or disabled during system boot.
NIC 3	Displays whether the third NIC is enabled (with or without PXE/iSCSI) or disabled during system boot.
NIC 4	Displays whether the fourth NIC is enabled (with or without PXE/iSCSI) or disabled during system boot.
Trusted Cryptographic Module (TCM)	Displays if TCM is on or off.
Trusted Platform Module (TPM) Security	Displays if TPM is off, on with pre-boot measurements, or on without pre-boot measurements.
Internal USB Port (number)	Displays if the internal USB is enabled or disabled. **NOTE:** Server Administrator may not display the USB sequence number if there is only one USB port on the system.
Operating System Watchdog Timer	Displays whether the operating system watchdog timer is enabled or disabled.
HT Assist	Displays the status of the probe filter chipset option.
Internal SD Card	Displays whether the internal SD card is enabled or disabled.
Bezel	Displays whether the bezel removal intrusion check during system reboot is enabled or disabled.
Console Redirection	Displays if the BIOS screen is redirected over a particular serial port or if it is turned off.
Diskette	Displays whether the diskette is disabled, auto enabled, or read-only.
Demand Based Power Management (DBS)	Displays whether DBS is enabled or disabled on the system.
Embedded Hypervisor	Displays whether the embedded hypervisor is enabled or disabled.
IDE	Displays whether the drive is enabled or disabled.

Table 3-3.   BIOS Setup Parameters *(continued)*

Parameters	Description
IDE Primary Drive 0	Displays whether the device is automatically detected and enabled or if the device is disabled.
IDE Primary Drive 1	Displays whether the device is automatically detected and enabled or if the device is disabled.
Intrusion	Displays whether the intrusion check is enabled or disabled during system boot.
Mouse	Displays whether the mouse is enabled or disabled.
Optical Drive Controller	Displays whether the optical drive controller is enabled or disabled.
Parallel port address	Displays whether the address is located on LPT1, LPT2, and LPT3, or if it is disabled.
Parallel port mode	Displays the setting associated with the parallel port.
Primary SCSI	Displays whether the device is on or off.
RAID on motherboard	Displays whether RAID-on-motherboard is detected as a RAID device, a SCSI device, or if the device is disabled during system boot.
RAID Channel A	Displays whether RAID-on-motherboard Channel A is detected as a RAID device or a SCSI device.
RAID Channel B	Displays whether RAID-on-motherboard Channel B is detected as a RAID device or a SCSI device.
SATA	
Serial Port 1	Displays whether serial port 1 is mapped to a COM port, a COM port 1, a COM port 3, a COM1 BMC, a BMC Serial, a BMC NIC, a BMC RAC, or is disabled.
Serial Port 2	Displays whether serial port 2 is mapped to a COM port, a COM port 2, a COM port 4, or is disabled.
Speaker	Displays whether the speaker is on or off.
USB or USBB	Displays whether the USB port is enabled or disabled.
Secondary SCSI	Displays whether the device is enabled or disabled.
Serial Communications	Displays whether COM port 1 and COM port 2 are off or on with or without console redirection.

Table 3-3. BIOS Setup Parameters *(continued)*

Parameters	Description
Console Redirection After Boot	Displays whether console redirection after system reboot is enabled or disabled.
External Serial Connector	Displays whether the external serial connector is mapped to Serial Device 1, Serial Device 2, or a Remote Access Device.
Console Redirection Failsafe Baud Rate	Displays the setting for console redirection failsafe baud rate.
Serial Address Select	Displays port address for the serial devices.

To view all available boot devices, alias names, and boot order sequences, type:

```
omreport chassis biossetup attribute=bootorder
```

NOTE: On Linux systems, user/user groups upgraded to administrator/administrator groups cannot view the boot order sequence.

omreport chassis currents/omreport mainsystem currents

This command is no longer available through Server Administrator.

omreport chassis removableflashmedia/omreport mainsystem removableflashmedia

Use the **omreport chassis removableflashmedia** or **omreport mainsystem removableflashmedia** to view the removable flash media details on the system along with its health status. Type:

```
omreport chassis removableflashmedia
or
omreport mainsystem removableflashmedia
```

Server Administrator displays a summary of your system's removable flash media information.

NOTE: If the vFlash or SD card size is less than 1 GB, size is displayed in MB.

Depending on your configuration of your system, you may notice the following output:

```
Removable Flash Media Information

Health : Critical

Internal Dual SD Module Redundancy : Critical

Attribute           : Redundancy

Value               : Lost

Internal SD Modules Status

Status              : OK

Connector Name      : System Board SD Status 1

State               : Present

Storage Size        : 512 MB

Status              : OK

Connector Name      : System Board SD Status 2

State               : Present

Storage Size        : 512 MB

VFlash Media Details

Connector Name      : System Board SD Status 1

Type                : vFlash SD Card

State               : Present

Available Size      : 472 MB

Storage Size        : 512 MB
```

omreport chassis fans/omreport mainsystem fans

Use the **omreport chassis fans** or **omreport mainsystem fans** command to view the fan probe status and settings. Type:

```
omreport chassis fans index=n
or
omreport mainsystem fans index=n
```

The `index` parameter is optional. If you do not specify the index, Server Administrator displays a summary of status, readings, and thresholds set for any fan probes that might be present on your system. If you specify the index, Server Administrator displays a summary for a specific fan probe.

omreport chassis firmware/omreport mainsystem firmware

Use the **omreport chassis firmware** or **omreport mainsystem firmware** command to view current firmware properties. Type:

```
omreport chassis firmware
or
omreport mainsystem firmware
```

Server Administrator displays a summary of your system's firmware properties.

NOTE: To maintain consistency across the commands, the output format of this command has changed. So, you may have to change the user scripts as applicable.

omreport chassis frontpanel/omreport mainsystem frontpanel

Use the **omreport chassis frontpanel** or **omreport mainsystem frontpanel** command to view if the front panel button control settings, such as the Power button and/or **Nonmasking Interrupt** (NMI) button (if present on the system), are enabled or disabled.

If the **Power** button override is present on your system, you can see whether the **Power** button override is enabled or not. If enabled, the **Power** button turns the power to the system **On** and **Off**.

If the **NMI** button is present on your system, you can see whether the **NMI** button is enabled or not. The **NMI** button can be used to troubleshoot software and device errors when using certain operating systems.

The **Front Panel LCD Security Access** displays if the front panel encryption access information is set to **View**, **Modify**, or **Disable**.

The **Front Panel LCD Information** displays information such as service tag, remote indication status, and so on.

omreport chassis fru/omreport mainsystem fru

Use the **omreport chassis fru** or **omreport mainsystem fru** command to view FRU information. When you type:

```
omreport chassis fru
or
omreport mainsystem fru
```

Server Administrator displays a summary of your system's FRU information. This information is available in the Server Administrator GUI, SNMP, and Common Information Model and is primarily used to support troubleshooting activities.

omreport chassis hwperformance/omreport mainsystem hwperformance

Use the **omreport chassis hwperformance** or **omreport mainsystem hwperformance** command to view the status and cause for the system's performance degradation. When you type:

```
omreport chassis hwperformance
or
omreport mainsystem hwperformance
```

Server Administrator displays a summary of your system's hardware performance degradation information.

NOTE: This command is applicable only to selected Dell *xx*0*x* systems that support PMBus.

Depending on your system's configuration, you may notice the following output:

```
Hardware Performance
Index                 : 0
Probe Name            : System Board Power Optimized
Status                : Normal
Cause                 : [N/A]
```

omreport chassis info/omreport mainsystem info

Use the **omreport chassis info** or **omreport mainsystem info** command to see a summary of installed component versions:

```
omreport chassis info index=n
or
omreport mainsystem info index=n
```

The `index` parameter specifies a chassis number and is optional. If you do not specify the index, Server Administrator displays summary chassis information for each chassis. If you specify the index, Server Administrator displays summary information for a specific chassis.

Depending on your system's configuration, you may notice the following output:

```
Index                         : 0
Chassis Name                  : Main System
                                Chassis
Host Name                     : everglades
Baseboard Management Controller  : 1.80
Version
Primary Backplane Version     : 1.01
Sensor Data Record Version    : SDR Version 0.33
Chassis Model                 : PowerEdge 1750
System Revision Name          : II
```

```
Chassis Lock                      : Present
Chassis Service Tag               : 8RLNB1S
Express service code              : 19083204784
Chassis Asset Tag                 :
Flash chassis indentify LED state : Off
Flash chassis indentify LED       : 300
timeout value
```

omreport chassis intrusion

Use the **omreport chassis intrusion** command to find out whether the cover of your system is open or not. Server Administrator tracks chassis intrusion events because intrusions may indicate an attempt to steal a system component, or to perform unauthorized maintenance on the system. Type:

```
omreport chassis intrusion
```

A message that resembles the following displays:

```
Status      : Ok
Probe Name  : Main chassis intrusion
State       : Chassis is closed
```

omreport chassis leds/omreport mainsystem leds

Use the **omreport chassis leds** or **omreport mainsystem leds** command to find out whether clear hard drive fault is supported and what severity level lights up the LED. Type:

```
omreport chassis leds index=n
or
omreport mainsystem leds index=n
```

The `index` parameter is optional. If you do not specify the index, Server Administrator displays a summary of LED information for chassis 0. If you specify the index, Server Administrator displays a summary for a specific chassis.

The following is an example output:

```
Flash chassis indentify LED state   : Off

Flash chassis indentify LED timeout : 300
value
```

omreport chassis memory/omreport mainsystem memory

Use **omreport chassis memory** or **omreport mainsystem memory** to view
details for each memory module slot in your system. If your system supports
redundant memory, this command also displays the status, state, and type of
memory redundancy implemented on your system. Type:

```
omreport chassis memory index=n
or
omreport mainsystem index=n
```

The **index** parameter is optional. If you do not specify the index, Server
Administrator displays information for all memory modules on your system.
If you specify the index, Server Administrator displays a summary for a
specific memory module.

> **NOTE:** To maintain consistency across the commands, the output format of this
> command and the subsequent command levels has changed. So, you may have to
> change the user scripts as applicable.

Output for an occupied memory slot may resemble the following:

```
Index          : 1
Status         : OK
Connector Name : DIMM_B
Type           : SDRAM-SYNCHRONOUS
Size           : 256 MB
```

An unoccupied memory slot still has a connector name. Output for an
unoccupied memory slot may resemble the following:

```
Index          : 2
Status         : Unknown
Connector Name : DIMM_D
Type           : Not Occupied
Size           : Unknown
```

If your system supports redundant memory, the redundancy output may resemble the following:

```
Memory Redundancy
Redundancy Status         : Full
Fail Over State           : Inactive
Redundancy Configuration  : SpareBank
Attributes                : Location
Memory Array 1            : Proprietary Add-on Card
Attributes                : Use
Memory Array 1            : Unknown
Attributes                : Installed Capacity
Memory Array 1            : 1536 MB
Attributes                : Maximum Capacity
Memory Array 1            : 12288 MB
Attributes                : Slots Available
Memory Array 1            : 12
```

omreport chassis nics/omreport mainsystem nics

Use the **omreport chassis nics** or **omreport mainsystem nics** command to view NIC and Team interface details.

To view NIC properties, type:

```
omreport chassis nics index=n
or
omreport mainsystem nics index=n
```

The **index** parameter is optional. If you do not specify the index, Server Administrator displays properties of all NICs on your system and the values for the following fields: **Index** (NIC card number)**, Interface Name**, **Vendor**, **Description**, **Connection Status**, and **Slot**.

If you specify the index, Server Administrator displays properties for a specific NIC and the values for the following fields: **Physical Interface**, **Interface**, **IPv4 Addresses**, **IPv6 Addresses**, **Physical Interface Receive Statistics**, **Physical Interface Transmit Statistics**, **Interface Receive Statistics**, and **Interface Transmit Statistics**.

To view Team interface properties, type:

```
omreport chassis nics config=team index=n
or
omreport mainsystem nics config=team index=n
```

📝 **NOTE:** This command is applicable only if Team interface is configured in the system. Team interface can be configured using NIC vendor tools, such as Broadcom.

The **index** parameter is optional. If you do not specify the index, Server Administrator displays details of all the Team interfaces on your system and the values for the following fields: **Index** (NIC card number)**, Interface Name**, **Vendor**, **Description**, and **Redundancy Status**.

If you specify the index, Server Administrator displays the Team interface details for the specific NIC and the values for the following fields: **Team Interface, Interface, IPv4 Addresses, IPv6 Addresses, Team Interface Receive Statistics, Team Interface Transmit Statistics, Interface Receive Statistics, and Interface Transmit Statistics.**

omreport chassis ports/omreport mainsystem ports

Use the **omreport chassis ports** or **omreport mainsystem ports** command to view properties of your system's parallel and serial ports.

Values display for the following fields: **Port Type**, **External Name**, **Base I/O Address**, **IRQ Level**, **Connector Type**, and **Maximum Speed**.

Port Type is the detailed type of each system port, from the more general serial, parallel, and USB ports to the names of ports by device type connected to it, for example, pointing device or keyboard.

External Name is the name of the port, such as serial or parallel, USB, mouse, keyboard, and so on.

Base I/O Address is the starting I/O address expressed in hexadecimal.

IRQ Level is a hardware interrupt on a system. The hardware interrupt signals the system's CPU that an event has started or ended in a peripheral component such as a modem or printer. When communicated over a peripheral component interconnect card, the IRQ level is a standard way to identify the type of device that is sending the interrupt request.

Connector Type refers to the type of plug or cable and plug that connects two devices together, in this case, the type of connector that attaches an external device to a system. There are many connector types, each designed to connect a different device type to a system. Examples include DB-9 Male, AT, Access Bus, PS/2, and so on.

Maximum Speed is the port speed. Port speed refers to the data transmission rate of an input/output channel, measured in numbers of bits per second. Serial ports usually have a maximum speed of 115 Kbps and USB version 1.*x* ports have a maximum speed of 12 Kbps.

omreport chassis processors/omreport mainsystem processors

Use the **omreport chassis processors** or **omreport mainsystem processors** command to view properties of your system's processors.

Values display for the following fields: **Index**, **Status**, **Connector Name**, **Processor Brand**, **Processor Version**, **Current Speed**, **State**, and **Core Count**.

Index is the processor number.

Status is the current status of the processor.

Connector Name is the name or number of the device that occupies the processor slot in the system.

Processor Brand is the type of processor made by a manufacturer such as Intel Itanium, Intel Pentium III, Intel Xeon, or AMD Opteron.

Processor Version is the model and stepping number of the processor.

Current Speed is the actual processor speed in MegaHertz at system boot time.

State is whether the processor slot is enabled or disabled.

Core Count is the number of processors integrated into one chip.

Capabilities and Cache Properties of a Specific Processor

To view the cache properties of a processor on a given connector, type:

```
omreport chassis processors index=n
or
omreport mainsystem processors index=n
```

The `index` parameter is optional. If you do not specify the index, Server Administrator displays properties for all processors. If you specify the index, Server Administrator displays properties for a specific processor.

The following fields are defined for the capabilities present on a particular microprocessor:

For Intel Processor

- 64-bit Support
- Hyperthreading (HT)
- Virtualization Technology (VT)
- Demand-Based Switching (DBS)
- Execute Disable (XD)
- Turbo Mode

For AMD Processor

- 64-bit Support
- AMD-V
- AMD PowerNow!
- No Execute (NX)

The following fields are defined for a cache present on a particular microprocessor. If the cache is internal to the processor, the fields do not appear in the cache report:

- Speed
- Cache Device Supported Type
- Cache Device Current Type
- External Socket Name

NOTE: Due to the limitations of certain operating systems (for example, VMware ESXi), certain features may not be available with this release of OpenManage Server Administrator.

Fields Reported for Each Cache on a Particular Processor

The following fields are displayed for each cache on a particular processor:

Status reports whether a specific cache on the processor is enabled or disabled.

Level refers to a primary or secondary cache. Primary-level cache is a memory bank built into the processor. Secondary-level cache is a staging area that feeds the primary cache. A secondary-level cache may be built into the processor or reside in a memory chipset outside the processor. The internal processor cache is referred to as a Level 1 (or L1). L2 cache is the external cache in a system with an Intel Pentium processor, and it is the second level of cache that is accessed. The names L1 and L2 are not indicative of where the cache is physically located (internal or external), but describe which cache is accessed first (L1, therefore internal).

Speed refers to the rate at which the cache can forward data from the main memory to the processor.

Max Size is the maximum amount of memory that the cache can hold in kilobytes.

Installed Size is the actual size of the cache.

Type indicates whether the cache is primary or secondary.

Location is the location of the cache on the processor or on a chipset outside the processor.

A **Write Policy** describes how the cache deals with a write cycle. In a write-back policy, the cache acts like a buffer. When the processor starts a write cycle, the cache receives the data and stops the cycle. The cache then writes the data back to the main memory when the system bus is available.

In a write-through policy, the processor writes through the cache to the main memory. The write cycle does not complete until the data is stored into the main memory.

Associativity refers to the way in which main memory content is stored on the cache.

- A fully associative cache allows any line in main memory to be stored at any location in the cache.
- A 4-way set-associative cache directly maps four specific lines of memory to the same four lines of cache.

- A 3-way set-associative cache directly maps three specific lines of memory to the same three lines of cache.

- A 2-way set-associative cache directly maps two specific lines of memory to the same two lines of cache.

- A 1-way set-associative cache directly maps a specific line of memory in the same line of cache.

For example, line 0 of any page in memory must be stored in line 0 of cache memory.

Cache Device Supported Type is the type of static random access memory (SRAM) that the device can support.

Cache Device Current Type is the type of the currently installed SRAM that the cache is supporting.

External Socket Name Silk Screen Name is the name printed on the system board next to the socket.

Error Correction Type identifies the type of error checking and correction (ECC) that this memory can perform. Examples are correctable ECC or uncorrectable ECC.

This report shows cache information for each cache present on the microprocessor.

omreport chassis pwrmanagement/omreport mainsystem pwrmanagement

Use the **omreport chassis pwrmanagement** or **omreport mainsystem pwrmanagement** command to view the power budget cap and power management profiles of your system. The values display either in Watts or BTU/Hr based on the configuration. Type:

```
omreport chassis pwrmanagement
or
omreport mainsystem pwrmanagement
```

NOTE: To maintain consistency across the commands, the output format of this command and the subsequent command levels has changed. So, you may have to change the user scripts as applicable.

For each power management profile in the system, values display for the following fields:

Maximum Performance, **Active Power Controller**, **OS Control**, and **Custom**.

Custom attributes are:

CPU Power and Performance Management, **Memory Power and Performance Management**, and **Fan Power and Performance Management**.

> 📝 **NOTE:** The **omreport chassis pwrmanagement** or **omreport mainsystem pwrmanagement** command is applicable only to selected Dell *xx1x* systems that support Power Management Bus (PMBus).

> 📝 **NOTE:** Power Management features are only available for PowerEdge systems that have hot-swappable power supplies and not systems that have a fixed, non-redundant power supply installed..

```
Power Inventory

    Attribute       :  System Idle Power
    Value           :  153 W
    Attribute       :  System Maximum Potential Power
    Value           :  597 W

Power Budget

    Attribute       :  Enable Power Cap
    Values          :  Enabled

    Attribute       :  Power Cap
    Values          :  400 W (56%)
```

omreport chassis pwrmonitoring/omreport mainsystem pwrmonitoring

Use the **omreport chassis pwrmonitoring** or **omreport mainsystem pwrmonitoring** command to view the properties of your system's power consumption. The values display either in Watts or BTU/Hr based on the configuration. Type:

```
omreport chassis pwrmonitoring
or
omreport mainsystem pwrmonitoring
```

For each power monitoring profile in the system, values display for the following fields:

- Power Consumption Status
- Probe Name
- Reading
- Warning Threshold
- Failure Threshold
- Amperage: Location and Reading
- Power Tracking Statistics
- Energy Consumption
- Measurement Start Time
- Measurement Finish Time
- Reading
- System Peak Power
- System Peak Amperage

NOTE: The **omreport chassis pwrmonitoring** or **omreport mainsystem pwrmonitoring** command is applicable only to selected Dell *xx0x and xx1x* systems that support PMBus.

NOTE: Power Management features are only available for PowerEdge systems that have hot-swappable power supplies and not systems that have a fixed, non-redundant power supply installed.

NOTE: To maintain consistency across the commands, the output format of this command and the subsequent command levels has changed. So, you may have to change the user scripts as applicable.

Table 3-4.   omreport chassis pwrmonitoring/omreport mainsystem pwrmonitoring

name=value pair	Description
config=stats	Reports power statistics in Watts.

```
Power Consumption Information
Power Consumption
    Index                   : 2
    Status                  : Ok
    Probe Name              : System Board System
                              Level
    Reading                 : 539W
    Warning Threshold       : 994W
    Failure Threshold       : 1400 W
Power Headroom
    Name                    : System Instantaneous
                              Headroom
    Reading                 : 300 W
    Name                    : System Peak Headroom
    Reading                 : 340 W
Amperage
    Location                : PS 1 Current 1
    Reading                 : 1.2 A
    Location                : PS 2 Current 2
    Reading                 : 1.0 A
```

```
Power Tracking Statistics

   Statistics              : Energy consumption

   Measurement Start Time  : Thu Jun 28 11:03:20 2007

   Measurement Finish      : FRI Jun 28 11:05:46 2007
   Time

   Reading                 : 5.9 KWH


   Statistics              : System Peak Power

   Measurement Start Time  : Mon Jun 18 16:03:20 2007

   Peak Time               : Wed Jun 27 00:23:46 2007

   Peak Reading            : 630 W


   Statistics              : System Peak Amperage

   Measured Since          : Mon Jun 18 16:03:20 2007

   Read Time               : Tue Jun 19 04:06:32 2007

   Peak Reading            : 2.5 A
```

omreport chassis pwrsupplies/omreport mainsystem pwrsupplies

Use the **omreport chassis pwrsupplies** or **omreport mainsystem pwrsupplies**
command to view properties of your system's power supplies. Type:

```
omreport chassis pwrsupplies
or
omreport mainsystem pwrsupplies
```

NOTE: To maintain consistency across the commands, the output format of this
command has changed. So, you may have to change the user scripts as applicable.

For each power supply profile in the system, values display for the following fields:

- Status
- Location
- Type
- Rated Input Wattage (in Watts)
- Maximum Output Wattage
- Online Status
- Power Monitoring Capable

omreport chassis remoteaccess/omreport mainsystem remoteaccess

Use the **omreport chassis remoteaccess** or **omreport mainsystem remoteaccess** command to view general information on baseboard management controller or integrated Dell remote access controller (BMC/iDRAC) and remote access controller if DRAC is installed.

Type:

```
omreport chassis remoteaccess
or
omreport mainsystem remoteaccess
```

✍ **NOTE:** To maintain consistency across the commands, the output format of this command and the subsequent command levels has changed. So, you may have to change the user scripts as applicable.

The output of the **omreport chassis remoteaccess/omreport mainsystem remoteaccess** command lists each of the valid parameters. Table 3-5 shows the available settings.

Table 3-5. omreport chassis remoteaccess/omreport mainsystem remoteaccess

name=value pair	Description
config=additional	Reports the current state of IPv4 and IPv6 addresses on iDRAC6.
config=advsol	Reports advanced BMC/iDRAC6 or remote access information on a serial over local area network (LAN) connection.
config=nic	Reports BMC/iDRAC6 or remote access information for the LAN.
config=serial	Reports serial port information for BMC or remote access.
config=serialoverlan	Reports BMC/iDRAC6 or remote access information on a serial over LAN connection.
config= terminalmode	Reports terminal mode settings for the serial port.
config=user	Reports information on BMC/iDRAC6 or remote access users.

omreport chassis slots/omreport mainsystem slots

Use the **omreport chassis slots** or **omreport mainsystem slots** command to view properties of your system's slots.

Type:

```
omreport chassis slots index=n
or
omreport mainsystem slots index=n
```

The index parameter is optional. If you do not specify the index, Server Administrator displays properties for all of the slots in your system. If you specify the index, Server Administrator displays properties for a specific slot.

> **NOTE:** To maintain consistency across the commands, the output format of this command has changed. So, you may have to change the user scripts as applicable.

For each slot in the system, values display for the following fields: **Index**, **Slot ID**, **Adapter**, and **Data Bus Width**.

Index is the number of the slot in the system.

Slot ID is the silk screen name printed on your system's motherboard next to the slot. Alphanumeric text uniquely identifies each slot in the system.

Adapter refers to the name and/or type of the card that fits into the slot, for example, a storage array controller, SCSI adapter, iDRAC6 Enterprise, or HBA.

Data Bus Width is the width, in bits, of the information pathway between the components of a system. The range of the data bus width can be from 16 to 64 bits.

omreport chassis temps/omreport mainsystem temps

Use the **omreport chassis temps** or **omreport mainsystem temps** command to view properties of your system's temperature probes. Type:

```
omreport chassis temps index=n
or
omreport mainsystem temps index=n
```

The `index` parameter is optional. If you do not specify the index, Server Administrator displays a summary of status, readings, and thresholds set for any temperature probes that might be present on your system. If you specify the index, Server Administrator displays a summary for a specific temperature probe.

omreport chassis volts/omreport mainsystem volts

Use the **omreport chassis volts** or **omreport mainsystem volts** command to view properties of your system's voltage probes. Type:

```
omreport chassis volts index=n
or
omreport mainsystem volts index=n
```

The `index` parameter is optional. If you do not specify the index, Server Administrator displays a summary of status, readings, and thresholds set for any voltage probes that might be present on your system. If you specify the index, Server Administrator displays a summary for a specific voltage probe.

omreport system Commands/omreport servermodule Commands

Use the **omreport system** or **omreport servermodule** commands to view logs, threshold values, cost of ownership information, and information about how shutdown actions and recovery actions are configured.

omreport system/omreport servermodule

Use the **omreport system** or **omreport servermodule** command to see a general status of the components of your system. When you specify a level 3 command, such as **omreport system shutdown/omreport servermodule shutdown**, you can get detailed information for one system component rather than the high-level status obtained with **omreport system** or **omreport servermodule**.

Type:

```
omreport system
or
omreport servermodule
```

If your system has both a main system chassis/main system and at least one direct attached storage device, Server Administrator may display a summary that resembles the following example:

```
SEVERITY  :  COMPONENT

Ok        :  Main System Chassis

Critical  :  Storage
```

Commands for Viewing Logs

You can use the **omreport system** or **omreport servermodule** command to view logs: the alert log, the command log, and the hardware or ESM log.

> ✏ **NOTE:** If the Alert log or Command log displays invalid XML data (such as when XML data generated for the selection is not well-formed), to clear the log and resolve the issue type: `omconfig system alertlog action=clear` or `omconfig system cmdlog action=clear`. If you need to retain the log information for future reference, save a copy of the log before clearing. See "Commands for Clearing Logs" on page 139 for more information about clearing logs.

To view the contents of the alert log, type:

```
omreport system alertlog
or
omreport servermodule alertlog
```

To view the contents of the command log, type:

```
omreport system cmdlog
or
omreport servermodule cmdlog
```

To view the contents of the ESM log, type:

```
omreport system esmlog
or
omreport servermodule esmlog
```

Overall Health Status of the ESM Log

When you type **omreport system esmlog** or **omreport servermodule esmlog**, the ESM log displays. The first line of the report reflects the overall health of the system hardware. For example, `Health: OK` means that less than 80 percent of the space allotted for the ESM log is occupied by messages. If 80 percent or more of the allotted space for the ESM log is occupied, the following caution appears:

```
Health: Non-Critical
```

If a caution appears, resolve all warning and critical severity conditions, and then clear the log.

omreport system alertaction/omreport servermodule alertaction

Use the **omreport system alertaction** or **omreport servermodule alertaction** command to view a summary of alert actions that have been configured for warning and failure events on your system components. Alert actions determine how Server Administrator responds when a component has a warning or failure event.

The **omreport system alertaction** or **omreport servermodule alertaction** command is useful for *viewing* which alert actions have been specified for components. To *set* an alert action for a component, use the **omconfig system alertaction** or **omconfig servermodule alertaction** command. For more information, see "omconfig: Managing Components Using the Instrumentation Service" on page 81.

NOTE: To maintain consistency across the commands, the output format of this command has changed. So, you may have to change the user scripts as applicable.

NOTE: Due to the limitations of certain operating systems (for example, VMware ESXi), certain features may not be available with this release of OpenManage Server Administrator.

Components and Events for Which You Can View Alert Actions

You can view alert action properties for the following components and events, if the components/events are present on the system:

- Battery Warning
- Battery Failure
- Chassis Intrusion
- Current Probe Warning
- Current Probe Failure
- Fan Warning
- Fan Failure
- Memory Pre-failure
- Memory Failure
- System Power Probe Warning
- System Power Probe Detects a Failure
- System Peak Power

- Power Supply Warning
- Power Supply Failure
- Degraded Redundancy
- Lost Redundancy
- Temperature Warning
- Temperature Failure
- Voltage Warning
- Voltage Failure
- Processor Warning
- Processor Failure
- Hardware Log Warning
- Hardware Log Full
- Watchdog Asr
- Storage System Warning
- Storage System Failure
- Storage Controller Warning
- Storage Controller Failure
- Physical Disk Warning
- Physical Disk Failure
- Virtual Disk Warning
- Virtual Disk Failure
- Enclosure Warning
- Enclosure Failure
- Storage Controller Battery Warning
- Storage Controller Battery Failure

- Removable Flash Media Present
- Removable Flash Media Removed
- Removable Flash Media Failure

📝 **NOTE:** Storage Controller Battery Warning and Storage Controller Battery Failure events are not available on modular systems.

📝 **NOTE:** System Power Probe Warning is not applicable to modular systems.

omreport system assetinfo/omreport servermodule assetinfo

Use the **omreport system assetinfo** or **omreport servermodule assetinfo** command to see cost of ownership data for the system, such as acquisition, depreciation, and warranty information. To *set* any of these fields, use the **omconfig system assetinfo** or **omconfig servermodule assetinfo** command. For more information, see "omconfig system or servermodule assetinfo: Editing Cost of Ownership Values" on page 153.

omreport system events/omreport servermodule events

Use the **omreport system events** or **omreport servermodule events** command to view the current enabled or disabled SNMP traps. This command displays a summary of each component in your system for which events can be generated. For each component, the report shows which severities are set to be reported and which severities are set not to be reported. The following is an example output for a few components:

```
omreport system events
or
omreport servermodule events

Current SNMP Trap Configuration
-----------
System
-----------
Settings
Enable: Informational, Warning and Critical
Disable: None
```

```
--------------
Power Supplies
---------------
Settings
Enable: Informational, Warning and Critical
Disable: None

-----------
Fans
-----------
Settings
Enable: Critical
Disable: Informational and Warning

--------------------
Removable Flash Media
--------------------
Settings
Enable: Informational, Warning and Critical
Disable: None
```

The full report lists the settings for all components in your system for which events can be generated.

To view the status for components of a specific type, use the **omreport system events type=** *<component name>* or **omreport servermodule event type=** *<component name>* command. This command displays a summary of each component in your system for which events can be generated. Table 3-6 shows the events displayed for various component types.

NOTE: Due to the limitations of certain operating systems (for example, VMware ESXi), certain features may not be available with this release of OpenManage Server Administrator.

Table 3-6. System Events by Component Type

name=value pair	Description
type=accords	Reports events for AC power cords
type=battery	Reports events for batteries
type=fanenclosures	Reports events for fan enclosures

Table 3-6.   System Events by Component Type *(continued)*

name=value pair	Description
type=fans	Reports events for fans
type=intrusion	Reports events for chassis intrusion
type=log	Reports events for logs
type=memory	Reports events for memory
type=powersupplies	Reports events for power supplies
type=redundancy	Reports events for redundancy
type=systempower	Reports events for system power
type=temps	Reports events for temperatures
type=removableflashmedia	Reports events for removable flash media
type=volts	Reports events for voltages

Example Command for an Event Type

Type:

```
omreport system events type=fans
or
omreport servermodule events type=fans
```

The following is an example output:

```
-----------
Fans
-----------
Settings
Enable: Critical
Disable: Informational and Warning
```

omreport system operatingsystem/omreport servermodule operatingsystem

Use the **omreport system operatingsystem** or **omreport servermodule operatingsystem** command to display information about your operating system.

omreport system pedestinations/omreport servermodule pedestinations

Use the **omreport system pedestinations** or **omreport servermodule pedestinations** command to view destinations where alerts for platform events are configured to be sent. Depending on the number of destinations displayed, you can configure a separate IP address for each destination address.

Type:

```
omreport system pedestinations
or
omreport servermodule pedestinations
```

The output of the **omreport system pedestinations** or **omreport servermodule pedestinations** command lists each of the valid parameters.

NOTE: To maintain consistency across the commands, the output format of this command has changed. So, you may have to change the user scripts as applicable.

NOTE: The actual number of destinations that can be configured on your system may differ. Table 3-7 shows the available settings.

Table 3-7.   Settings for the omreport system pedestinations/omreport servermodule pedestinations

Output	Attributes	Description
Destination List		
	Destination Number: Destination1	**destination 1**: Displays the first destination.
	Destination IP Address: 101.102.103.104	**101.102.103.104**: IP address of the first destination.
	Destination Number: Destination 2	**destination 2**: Displays the second destination.
	Destination IP Address: 110.120.130.140	**110.120.130.140**: IP address of the second destination.
	Destination Number: Destination 3	**destination 3**: Displays the third destination.
	Destination IP Address: 201.202.203.204	**201:202:203:204**: IP address of the third destination.

Table 3-7.   Settings for the omreport system pedestinations/omreport servermodule pedestinations *(continued)*

Output	Attributes	Description
	Destination Number: Destination 4	**destination 4**: Displays the fourth destination.
	Destination IP Address: 210.211.212.213	**210.211.212.213**: IP address of the fourth destination.
Destination Configuration Settings		
	attribute= communitystring	**communitystring**: Displays the text string that acts as a password and is used to authenticate SNMP messages sent between the BMC and the destination management station.

omreport system platformevents/omreport servermodule platformevents

Use the **omreport system platformevents** or **omreport servermodule platformevents** command to view how the system responds for each listed platform event.

NOTE: To maintain consistency across the commands, the output format of this command has changed. So, you may have to change the user scripts as applicable.

omreport system recovery/omreport servermodule recovery

Use the **omreport system recovery** or **omreport servermodule recovery** command to see whether there is an action configured for a hung operating system. You can also view the number of seconds that must elapse before an operating system is considered hung.

omreport system shutdown/omreport servermodule shutdown

Use the **omreport system shutdown** or **omreport servermodule shutdown** command to view any pending shutdown actions for your system. If properties for shutdown are configured, executing this command displays these properties.

📝 **NOTE:** Due to the limitations of certain operating systems (for example, VMware ESXi), certain features may not be available with this release of OpenManage Server Administrator.

omreport system summary/omreport servermodule summary

Use the **omreport system summary** or **omreport servermodule summary** command to view a comprehensive summary of software and hardware components currently installed on your system.

Example Command Output

Type:

```
omreport system summary
or
omreport servermodule summary
```

📝 **NOTE:** If the vFlash or SD card size is less than 1 GB, size is displayed in MB.

The output that appears in your CLI window depends on the systems management software, operating system, and hardware components and options installed on your system. The following *partial* command results are unique and may not resemble the hardware and software configuration of your system:

```
System Summary
--------------
----
Software
Profile
-------------
----
System
Management
```

```
Name              : Dell OpenManage Server
                    Administrator

Version           : 6.x.x

Description       : Systems Management Software

Contains          : Instrumentation Service 6.x.x

                  : Storage Management Service 3.x.x

                  : Sun JRE - OEM Installed Version
                    1.x.x

                  : Secure Port Server 1.x.x

                  : Dell OpenManage Core Service 1.x.x

                  : Instrumentation Service Integration
                    Layer 1.x.x

                  : Storage Management Service
                    Integration Layer 1.x.x

Operating
System

Name              : Microsoft Windows 2003 Server

Version           : Service Pack 2(Build 2XXX)

System Time       : Fri Sep 20 18:02:52 2XXX

System Bootup     : Wed Sep 18 18:37:58 2XXX
Time

System
--------------

Host Name         : svctag-dxxxxs

System            : Please set the value
Location

Model             : PowerEdge 1955

Life Cycle        : Enabled
Controller

Asset Tag         : Test
```

```
Service Tag      : 6JS4V1S

Express          : 14256807472
service code

Slot Number      : Slot 01-02

Form Factor      : Half Height Dual Width

Remote Access
Information

Remote Access    : iDRAC6 Enterprise
Device

vFlash Media     : Present

vFlash Media     : vFlash SD Card
Type

vFlash Media     : 922 MB
Available Size

vFlash Media     : 976 MB
Size

Processor 1

Processor        : Intel(R) Xeon(R) CPU
Brand

Processor        : Model 15 Stepping 6
Version

Voltage          : 1400 mV

Processor 2

Processor        : Intel(R) Xeon(R) CPU
Brand

Processor        : Model 15 Stepping 6
Version

Voltage          : 1400 mV

Memory
```

```
Total              : 2048 MB
Installed
Capacity

Memory             : 2048 MB
Available to
the OS

Total Maximum      : 32768 MB
Capacity

Memory Array       : 1
Count

Remote Access Controller

Remote Access Controller Information

Product            : iDRAC6 Enterprise

IP Address         : 192.xxx.x.xxx

IP Subnet          : 255.xxx.x.xxx

IP Gateway         : 192.xxx.x.xxx

IPv6 Address 1 : ::

IPv6 Address 2 : ::

IPv6 Gateway   : ::

Network Data

Network
Interface 0

IP Address         : [No Value]

Network
Interface 1

IP Address         : [No Value]
```

The system summary hardware information includes data values for installed components of the following types present in your system:

System Attributes

- Host name
- System location
- Life Cycle Controller

Main System Chassis/Main System

Chassis

- Chassis Model
- Chassis Service Tag
- Express Service Code
- Chassis Lock
- Chassis Asset Tag

Remote Access Information

- Remote Access Device
- vFlash Media
- vFlash Media Size

Processor

The following are listed for each processor in the system:

- Processor Brand
- Processor Family
- Processor Version
- Current Speed
- Maximum Speed
- External Clock Speed
- Voltage

Memory

- Total Installed Capacity
- Memory Available to the Operating System
- Total Maximum Capacity
- Memory Array Count

Memory Array

The following details are listed for each memory board or module in the system (for example, the system board or the memory module in a given slot number):

- Location
- Use
- Installed Capacity
- Maximum Capacity
- Slots Available
- Slots Used
- Ecc Type

BIOS

- Manufacturer
- BIOS Version
- Release Date

Firmware

- Name
- Version

Network Data

The following details are listed for each NIC and Team interface, if Team interface is configured in the system:

- IP Address
- Subnet Mask
- Default Gateway
- MAC Address

Storage Enclosures

The following details are listed for each storage enclosure attached to the system:

- Name
- Service Tag

omreport system thrmshutdown/omreport servermodule thrmshutdown

Use the **omreport system thrmshutdown** or **omreport servermodule thrmshutdown** command to view the properties configured for a thermal shutdown action.

The three properties that display for thermal shutdown are **disabled**, **warning**, or **failure**. If the CLI displays the following message, the thermal shutdown feature has been disabled:

```
Thermal protect shutdown severity: disabled
```

If the system is configured to shutdown when a temperature probe detects a warning or failure event, one of the following messages displays:

```
Thermal protect shutdown severity: warning
Thermal protect shutdown severity: failure
```

omreport system version/omreport servermodule version

Use the **omreport system version** or **omreport servermodule version** command to list the version numbers of the BIOS, firmware, systems management software, and operating system installed on your system.

Example Command Output

Type:

```
omreport system version
or
omreport servermodule version
```

The output that appears in your CLI window depends on the version of the BIOS, RAID controllers, and firmware installed on your system. The following *partial* command results are unique and may not resemble the results for the configuration of your system:

```
Version Report

--------------------
Main System Chassis
--------------------

Name        : BIOS
Version     : 0.2.16


Name        : BMC
Version     : 0.26


Name        : Primary Backplane
Version     : 1.01

---------------
Software
---------------

Name        : Microsoft Windows Server 2003,
              Enterprise Edition


Version     : 5.2 <Build 3790: Service Pack 2><x86>


Name        : Dell Server Administrator
Version     : 6.x.x
```

omreport preferences Commands

Use the **omreport preferences** command to view the URL information of your Server Administrator Web server.

Table 3-8 shows the available attributes.

Table 3-8.   omreport preferences webserver

name=value pair	Description
attribute=geturl	Reports the URL information of your Web server.
attribute=getsignalgorithm	Reports the current key sign algorithm.

4

omconfig: Managing Components Using the Instrumentation Service

The **omconfig** command allows you to provide values that define warning events, configure alert actions, clear logs, and configure system shutdown, as well as allowing you to perform other systems management tasks.

Examples of **omconfig** capabilities include:

- Administrator privilege to clear command, alert, and hardware logs

- Administrator privilege to configure and execute system shutdown

- Power user and administrator privilege to default or specify values for warning events on fans, voltage probes, and temperature probes

- Power user and administrator privilege to set alert actions in the event of a warning or failure event from intrusion, fans, voltage probes, and temperature probes

For information on using the **omconfig** system command to view and manage cost of ownership information (**assetinfo**), see "omconfig system or servermodule assetinfo: Editing Cost of Ownership Values" on page 153.

Often, you must use the **omreport** commands to get the information you need to execute an **omconfig** command. For example, if you want to edit the minimum temperature for a warning event on a temperature probe, you need to know the index of the probe you want to configure. You can use the **omreport chassis temps** or **omreport mainsystem temp** command to display a list of probes and their indexes. For more information on using the **omreport** command, see "omreport: Viewing System Status Using the Instrumentation Service" on page 27.

Table 4-1. System Availability for the omconfig Command

Command Level 1	Command Level 2	Applicable to
omconfig	servermodule	Modular system
	mainsystem	Modular system
	system	Non-modular system
	chassis	Non-modular system

Conventions for Parameter Tables

When listing the parameters that a command can take, the parameters are listed in alphabetical order instead of the order in which they appear in the command line interface.

The symbol |, often called *pipe*, is the logical *exclusive or* operator. For example, enable | disable means that you can enable or disable the component or feature, but you cannot simultaneously enable and disable the component or feature.

omconfig Command Summary

NOTE: Although this section lists all possible **omconfig** commands, the commands available on your system depend on your system configuration. If you try to get help or execute a command for a component not installed on your system, Server Administrator issues a message that the component or feature is not found on the system.

Table 4-2 is a high-level summary of the **omconfig** command. The columns titled *Command level 2* and *Command level 3* list the major arguments that can be used with **omconfig**. *User privilege required* refers to the type of privilege you need to perform the command, where U=User, P=Power User, and A=Administrator. *Use* is a very general statement about the actions that can be performed using **omconfig**. More details about syntax and use of the command appear later in this section.

Table 4-2.   omconfig Command Level 1, Level 2, and Level 3

Command Level 1	Command Level 2	Command Level 3	User Privilege Required	Use
omconfig				
	about		U, P, A	Shows version number and properties for the Server Administrator program.
		details=true	U, P, A	Displays information for all of the Server Administrator programs that are installed.
	preferences			
		cdvformat	A	Specifies the delimiter for separating data fields reported in custom delimited format (cdv).
		dirservice	A	Configures the Microsoft Active Directory service.
		snmp	A	Sets the SNMP root password. Configures SNMP Set Operations.
		useraccess	A	Determines whether users below the administrator level are allowed to use Server Administrator or not.
		webserver	A	Allows the administrator to set the encryption levels of the Web server and configure the URL launch point in the Server Administrator Web server environment.
	system/ servermodule			

Table 4-2. omconfig Command Level 1, Level 2, and Level 3 *(continued)*

Command Level 1	Command Level 2	Command Level 3	User Privilege Required	Use
		alertaction	P, A	Determines in advance the actions to be taken for warning or failure events on intrusion, fans, temperatures, voltages, power supplies, memory, and redundancy.
		alertlog	P, A	Allows the administrator to clear the alert log.
		assetinfo	P, A	Enters and edits cost of ownership information for your system, including values for depreciation, lease, maintenance, service, and support.
		cmdlog	P, A	Allows the administrator to clear the command log.
		esmlog	P, A	Allows the administrator to clear the ESM log.
		events	P, A	Enables and disables SNMP traps.
		pedestinations	P, A	Sets IP addresses for alert destinations.
		platformevents	A	Determines the shutdown action, if any, to be taken for a specific platform event. Also, enables and disables platform events filter alert generation.
		recovery	P, A	Determines in advance how your system responds to a hung operating system.

Table 4-2.   omconfig Command Level 1, Level 2, and Level 3 *(continued)*

Command Level 1	Command Level 2	Command Level 3	User Privilege Required	Use
		shutdown	A	Allows the administrator to select from several options when shutting down the system.
		thrmshutdown	A	Sets the severity level at which a thermal event triggers a system shutdown.
		webserver	A	Starts or stops the Web server.
	chassis/ mainsystem			
		biossetup	A	Configures the behavior of specific system components controlled by the BIOS.
		fans	P, A	Configures fan probe warning thresholds by default or by value. **NOTE:** You cannot change threshold values on embedded server management (ESM3) and Dell PowerEdge *x8xx* systems.
		frontpanel	A	Configures the **Power** button, **Non-Masking Interrupt** (NMI) button, encryption access, and LCD display of the system.
		info	P, A	Allows you to set an initial value, or to edit the value for, asset tag or chassis name.

Table 4-2.   omconfig Command Level 1, Level 2, and Level 3 *(continued)*

Command Level 1	Command Level 2	Command Level 3	User Privilege Required	Use
		leds	P, A	Specifies when to flash a chassis fault LED or chassis identification LED, and allows you to clear the LED for the system's hard drive.
		memorymode	A	Enables or disables the spare bank and mirroring memory modes, and also specify which mode to use.
		pwrmanagement	P, A	Allows you to choose between maximum power economy and optimized performance of the system.
		pwrmonitoring	P, A	Configures power consumption information and thresholds.
		remoteaccess	A	Configures remote access information.
		temps	P, A	Sets warning threshold values by default or value. **NOTE:** You cannot change threshold values on ESM3 and PowerEdge *x8xx* systems.
		volts	P, A	Sets warning threshold values by default or value. **NOTE:** You cannot change threshold values on ESM3 and PowerEdge *x8xx* systems.
	storage			See "Using the Storage Management Service" on page 171.

Help With the omconfig Command

Use the **omconfig -?** command to get a list of the available commands for **omconfig**.

Use **omconfig** <*command level 2*> **-?** to get help on the **about**, **chassis**, **preferences**, and **system**'s level 2 commands. The following information on **omconfig system -?** applies equally to getting help for the **omconfig chassis** command.

Use the **omconfig system -?** command to get a list of the available commands for **omconfig system**.

Use the **omconfig preferences -?** command to get a list of the available commands for **omconfig preferences**, such as **cdvformat**, which is the custom delimiter format (cdv)**.** Type the following command to display the list of delimiter values for the cdv:

```
omconfig preferences cdvformat -?
```

Use a command of the form **omconfig system** <*command level 3*> **-?** to get a list of the parameters you must use to execute a particular **omconfig system** command. For example, the following commands produce a list of valid parameters for **omconfig system alertaction** and **omconfig system shutdown**:

```
omconfig system alertaction -?
```

```
omconfig system shutdown -?
```

In case of the **omconfig system alertaction** command, you can use various options to prevent all of the command line interface (CLI) help from scrolling, before you can read it.

To scroll command output one screen at a time, type:

```
omconfig system alertaction -? | more
```

where **| more** allows you to press the spacebar to see the next screen of the CLI help output.

To make a file that contains all the help for the **omconfig system alertaction -?** command, type:

```
omconfig system alertaction -? -outa alert.txt
```

where **-outa** directs the output of the command to a file called **alert.txt**.

To read the help for the **alertaction** command on a Microsoft Windows, Red Hat Enterprise Linux, or SUSE Linux Enterprise Server operating system, type:

```
more alert.txt
```

omconfig about

Use the **omconfig about** command to learn the product name and version number of the systems management application installed on your system. The following is an example output of the **omconfig about** command:

```
Product    : Dell OpenManage Server Administrator
name
Version    : 6.x.x
Copyright  : Copyright (C) Dell Inc. 1995-2010. All
             rights reserved.
Company    : Dell Inc.
```

For more details about the environment for Server Administrator, type:

```
omconfig about details=true
```

Server Administrator includes a number of services, each of which has a version number of its own. The **Contains** field reports version numbers for the services and provides other useful details. The output that follows is an example, and it can change depending on the configuration of your system and the version of Server Administrator that is available:

```
Contains: Broadcom SNMP Agent 10.xx.xx

          Common Storage Module 3.x.x

          Data Engine 5.x.x

          Hardware Application Programming Interface
          5.x.x

          Instrumentation Service 6.x.x

          Instrumentation Service Integration Layer
          1.x.x

          Intel SNMP Agent 1.xx.x

          OpenManage Inventory Collector 6.x.x
```

```
OpenManage Tools 6.x.x

Remote Access Controller 4 Data Populator
4.x.x

Remote Access Controller 4 Managed Node
4.6.3

Secure Port Server 1.x.x

Server Administrator Framework 6.x.x

Agent for Remote Access 1.x.x

Storage Management 3.x.x

Sun Java Runtime Environment 1.x.xx
```

omconfig chassis/omconfig mainsystem

Use the **omconfig chassis** or **omconfig mainsystem** commands to default or to set values for fan, voltage, and temperature probes, to configure BIOS behavior during system start up, to clear memory error counts, and to enable or disable power button control features where system configuration permits.

Use the **omconfig chassis -?** or **omconfig mainsystem -?** command to view a list of all **omconfig chassis/omconfig mainsystem** commands.

omconfig chassis biossetup/omconfig mainsystem biossetup

Use the **omconfig chassis biossetup** or **omconfig mainsystem biossetup** command to configure system BIOS settings that are normally available only in the BIOS setup boot time settings of your system.

⚠ **CAUTION: Changing certain BIOS setup options might disable your system or require you to reinstall the operating system.**

✎ **NOTE:** Reboot your system for the BIOS setup options take effect.

✎ **NOTE:** Not all BIOS setup options are available on every system.

✎ **NOTE:** Due to the limitations of certain operating systems (for example, VMware ESXi), certain features may not be available with this release of OpenManage Server Administrator.

Table 4-3 shows the name=value pairs you can use with this command.

Table 4-3. BIOS Setup Settings

name=value pair 1 attribute=	name=value pair 2 setting=	Description
attribute= acpwrrecovery	setting=off | last| on	**off**: System is turned off.
		last: System returns to previous state.
		on: System is turned on.
	delay=random | immediate | timedelay time <value>	**random**: System is turned on with random delay.
		immediate: System returns to previous state immediately.
		timedelay <value>: System is turned on based on user specified time delay.
attribute=bezel	setting=enabled | disabled	**enabled**: Enables the bezel removal intrusion check during system boot.
		disabled: Disables the bezel removal intrusion check during system boot.
attribute= bootsequence	setting=diskettefirst | hdonly | devicelist |cdromfirst | opticaldrive	Instructs the BIOS which device is used to boot the system, and the order in which the boot routine is to check each device.
		NOTE: On Linux systems, user/user groups upgraded to administrator/administrator groups cannot configure this BIOS setup setting.
attribute= bootmode	setting=uefi | bios	**uefi**: Enables the system to boot to operating systems that support Unified Extensible Firmware Interface (UEFI).
		bios: Enables the system to boot to operating systems that do not support UEFI.

Table 4-3. BIOS Setup Settings *(continued)*

name=value pair 1 attribute=	name=value pair 2 setting=	Description
attribute= bootorder	sequence=aliasname1, aliasname2,..... aliasnameN	Configures the boot sequence according to the set aliasnames. To view the set alias names, run the command `omreport chassis biossetup attribute= bootorder`. **NOTE:** On Linux systems, user/user groups upgraded to administrator/administrator groups cannot configure this BIOS setup setting.
attribute= hddorder	sequence=aliasname1, aliasname2,..... aliasnameN	Configures the BIOS setup hard disk sequence according to the set aliasnames. Changes takes effect after rebooting the system. To view the set alias names, run the command `omreport chassis biossetup attribute= bootorder`. **NOTE:** On Linux systems, user/user groups upgraded to administrator/administrator groups cannot configure this BIOS setup setting.
attribute=cstates	setting=enabled | disabled	**enabled**: Enables the processor to go into a deep sleep state when the system is not utilized. **disabled**: Disables the processor to go into a deep sleep state when the system is not utilized.

Table 4-3. BIOS Setup Settings *(continued)*

name=value pair 1 attribute=	name=value pair 2 setting=	Description
attribute= conredirect	setting=enabled | disabled	**enabled**: Redirects the BIOS screen over Serial Port 1. Keyboard and text output are redirected over Serial Port 2. **disabled**: Turns off the BIOS console redirection.
attribute=crab	setting=enabled | disabled	**enabled**: Enables BIOS console redirection after system reboot. **disabled**: Disables BIOS console redirection. **NOTE:** The command **crab** is valid for Dell PowerEdge *x9xx* systems only.
attribute=cpuc1e	setting=enabled | disabled	**enabled**: Enables processor C1-E after system reboot. **disabled**: Disables processor C1-E after system reboot.
attribute=cpuht	setting=enabled | disabled	**enabled**: Enables logical processor hyperthreading. **disabled**: Disables logical processor hyperthreading.
attribute=cpuvt	setting=enabled | disabled	**enabled**: Enables virtualization. **disabled**: Disables virtualization.

Table 4-3.   BIOS Setup Settings *(continued)*

name=value pair 1 attribute=	name=value pair 2 setting=	Description
attribute= cpuxdsupport	setting=enabled | disabled	**enabled**: Enables Execute Disable (XD) support on system.
		disabled: Disables XD support on system.
attribute=cpucore	setting=1 | 2 | 4 | 6 | 8 | 10 | 12 |all	**1**: Enables one core per processor.
		2: Enables two cores per processor.
		4: Enables four cores per processor.
		6: Enables six cores per processor.
		8: Enables eight cores per processor.
		10: Enables ten cores per processor.
		12: Enables twelve cores per processor.
		all: Enables the maximum cores per processor.
attribute=dbs	setting=enable | disable	**enable**: Enables Demand Based Switching (DBS) on the system.
		disable: Disables DBS on the system.
attribute=diskette	setting=off | auto | writeprotect	**off**: Disables the diskette drive.
		auto: Auto-enables the diskette drive.
		writeprotect: Do not allow writes. Make the diskette drive read-only.

Table 4-3. BIOS Setup Settings *(continued)*

name=value pair 1 attribute=	name=value pair 2 setting=	Description
attribute=dualnic	setting=off | on | pxeboth | nic1pxe |nic2pxe | isciboth | nic1isci | nic2isci | nic1pxenic2isci | nic1iscinic2pxe | onpxeboth | onpxenone | onpxenic1 | onpxenic2	**off**: Disables the Network Interface Controllers (NICs).
		on: Enables the network interface (PXE or iSCSI is not enabled on either of the NICs).
		pxeboth: Enables PXE on both NICs.
		nic1pxe: Enables PXE on first NIC and none (No PXE or iSCSI) on second NIC.
		nic2pxe: Enables none (No PXE or iSCSI) on first NIC and PXE on second NIC.
		isciboth: Enables iSCSI on both NICs.
		nic1isci: Enables iSCSI on first NIC and none (No PXE or iSCSI) on second NIC.
		nic2isci: Enables none (No PXE or iSCSI) on first NIC and iSCSI on second NIC.
		nic1pxenic2isci: Enables PXE on first NIC and iSCSI on second NIC.
		nic1iscinic2pxe: Enables iSCSI on first NIC and PXE on second NIC.
		NOTE: The following options are deprecated:
		onpxeboth: Enables PXE on both NICs.
		onpxenone: PXE is not enabled on either of the NICs.
		onpxenic1: Enables PXE on NIC 1.
		onpxenic2: Enables PXE on NIC 2.
attribute= embhypvisor	setting=enabled | disabled	**enabled**: Enables embedded hypervisor.
		disabled: Disables embedded hypervisor.

Table 4-3. BIOS Setup Settings (continued)

name=value pair 1 attribute=	name=value pair 2 setting=	Description
attribute= embvideoctrl	setting=enabled | disabled	**enabled**: Enables the embedded video controller to be the primary video device.
		disabled: Disables the embedded video controller to be the primary video device.
attribute= esataport	setting=off | auto	**off**: Sets the embedded SATA port value to **off**.
		auto: Sets the embedded SATA port value to **auto**.
attribute= extserial	setting=com1 | com2 | rad	**com1**: Maps external serial connector to COM 1.
		com2: Maps external serial connector to COM 2.
		rad: Maps external serial connector to remote access device.
attribute=fbr	setting=9600 | 19200 | 57600 | 115200	**9600**: Sets the console redirection failsafe baud rate to 9600 bits per second.
		19200: Sets the console redirection failsafe baud rate to 19200 bits per second.
		57600: Sets the console redirection failsafe baud rate to 57600 bits per second.
		115200: Sets the console redirection failsafe baud rate to 115200 bits per second.
attribute=htassist	setting=enabled | disabled	**enabled**: Enables the probe filter chipset option.
		disabled: Disables the probe filter chipset option.
		NOTE: Certain applications do not function fully if you enable or disable this option.

Table 4-3.   BIOS Setup Settings *(continued)*

name=value pair 1 attribute=	name=value pair 2 setting=	Description
attribute=ide	setting=on | off force=true	**on**: Enables this device. **off**: Disables this device. **force=true**: Verification of setting change.
attribute= idepridrv	setting=off | auto	**off**: Disables the device. **auto**: Detects and enables the device automatically.
attribute= intrusion	setting=enabled | disabled	**enabled**: Enables the intrusion check during system boot. If the system also has bezel intrusion checking, then the intrusion option checks for removal of the bezel of the system. **disabled**: Disables the intrusion check during system boot.
attribute= intusb[1..2] **NOTE:** The following option is deprecated: attribute=intusb	setting=enabled | disabled	**enabled**: Enables the internal USB port. **disabled**: Disables the internal USB port.
attribute=mouse	setting=on | off	**on**: Enables the mouse. **off**: Disables the mouse.

Table 4-3.   BIOS Setup Settings *(continued)*

name=value pair 1 attribute=	name=value pair 2 setting=	Description
attribute=nic1	setting=enabled | enabledwithpxe | disabled | enabledonly | enablednonepxe | enabledwithiscsi	**enabled**: Enables the first NIC during system boot.
		enabledwithpxe: Enables the first NIC during system boot (with PXE on if the system has PXE)
		disabled: Disables the first NIC during system boot.
		enabledonly: Enables the first NIC during system boot (with PXE off if the system has PXE).
		enablednonepxe: Enables the first NIC during system boot (with PXE off if the system has PXE).
		enabledwithiscsi: Enables the first NIC during system boot (with iSCSI on if the system has iSCSI).
attribute=nic2	setting=enabled | enabledwithpxe | disabled | enabledonly | enablednonepxe | enabledwithiscsi	**enabled**: Enables the second NIC during system boot.
		enabledwithpxe: Enables the second NIC during system boot (with PXE on if the system has PXE)
		disabled: Disables the second NIC during system boot.
		enabledonly: Enables the second NIC during system boot (with PXE off if the system has PXE).
		enablednonepxe: Enables the second NIC during system boot (with PXE off if the system has PXE).
		enabledwithiscsi: Enables the second NIC during system boot (with iSCSI on if the system has iSCSI).

Table 4-3. BIOS Setup Settings *(continued)*

name=value pair 1 attribute=	name=value pair 2 setting=	Description
attribute=nic3	setting=enabled | enabledwithpxe | disabled | enabledonly | enablednonepxe | enabledwithiscsi	**enabled**: Enables the third NIC during system boot. **enabledwithpxe:** Enables the third NIC during system boot (with PXE on if the system has PXE) **disabled**: Disables the third NIC during system boot. **enabledonly**: Enables the third NIC during system boot (with PXE off if the system has PXE). **enablednonepxe**: Enables the third NIC during system boot (with PXE off if the system has PXE). **enabledwithiscsi**: Enables the third NIC during system boot (with iSCSI on if the system has iSCSI).
attribute=nic4	setting=enabled | enabledwithpxe | disabled | enabledonly | enablednonepxe | enabledwithiscsi	**enabled**: Enables the fourth NIC during system boot. **enabledwithpxe:** Enables the fourth NIC during system boot (with PXE on if the system has PXE) **disabled**: Disables the fourth NIC during system boot. **enabledonly**: Enables the fourth NIC during system boot (with PXE off if the system has PXE). **enablednonepxe**: Enables the fourth NIC during system boot (with PXE off if the system has PXE). **enabledwithiscsi**: Enables the fourth NIC during system boot (with iSCSI on if the system has iSCSI).

Table 4-3. BIOS Setup Settings *(continued)*

name=value pair 1 attribute=	name=value pair 2 setting=	Description
attribute= numlock	setting=on | off	**on**: Uses the keypad as number keys.
		off: Uses the keypad as arrow keys.
attribute=numa	setting=enabled | disabled	**enabled**: Enables Node Interleaving.
		disabled: Disables Node Interleaving.
attribute= ppaddress	setting=off | lpt1 | lpt2 | lpt3	**off**: Disables the parallel port address.
		lpt1: Locates the device on LPT1.
		lpt2: Locates the device onLPT2.
		lpt3: Locates the device on LPT3.
attribute= ppmode	setting=at | ps2 | ecp | epp	**at**: Sets the parallel port mode to type AT.
		ps2: Sets the parallel port mode to type PS/2.
		ecp: Sets the parallel port mode to type ECP (extended capabilities port).
		epp: Sets the parallel port mode to type EPP (enhanced parallel port).
attribute= primaryscsi	setting=on | off force=true	**CAUTION: If you modify the setting for *primary scsi*, *romb*, *romba*, or *rombb*, your system becomes inoperable until you reinstall the operating system.**
		on: Enables this device.
		off: Disables this device.
		force=true: Verification of setting change.

Table 4-3. BIOS Setup Settings *(continued)*

name=value pair 1 attribute=	name=value pair 2 setting=	Description
attribute=romb	setting=raid | off | scsi force=true	**raid**: Instructs the BIOS to detect RAID-on-motherboard as a RAID device.
		off: Disables the device during system boot.
		scsi: Instructs the BIOS to detect this device as a SCSI device.
		force=true: Verification of setting change.
attribute=romba	setting=raid | scsi force=true	**raid**: Instructs the BIOS to detect RAID-on-motherboard channel A as a RAID device.
		scsi: Instructs the BIOS to detect this device as a SCSI device.
		force=true: Verification of setting change.
attribute=rombb	setting=raid | scsi force=true	**raid**: Instructs the BIOS to detect RAID-on-motherboard channel B as a RAID device.
		scsi: Instructs the BIOS to detect this device as a SCSI device.
		force=true: Verification of setting change.
attribute=sata	setting=off | ata | raid	**off**: Disables the SATA controller.
		ata: Sets the onboard SATA controller to ATA mode.
		raid: Sets the onboard SATA controller to RAID mode.
attribute=sataport (0...7) or (a...h)	setting=off | auto	**off**: Disables the SATA port.
		auto: Automatically enable the SATA port.

Table 4-3.   BIOS Setup Settings *(continued)*

name=value pair 1 attribute=	name=value pair 2 setting=	Description
attribute= secondaryscsi	setting=on | off	**on**: Enables this device.
		off: Disables this device.
attribute= serialportaddr	setting=default | alternate | com1 | com2	**default**: Maps to Serial device1=COM1, Serial device2=COM2.
		alternate: Maps to Serial device1= COM2, Serial device2=COM1
		com1: Sets serial port address to COM1.
		com2: Sets serial port address to COM2.
attribute= serialcom	setting=off | on |com1 |com2 | onwithconsole	**off**: Disables serial communication setting.
		on: Enables serial communication setting without console redirection.
		com1: Enables serial communication setting with console redirection via COM 1.
		com2: Enables serial communication setting with console redirection via COM 2.
		onwithconsole: Enables serial communication with console redirection via COM 1 and COM 2.

Table 4-3. BIOS Setup Settings *(continued)*

name=value pair 1 attribute=	name=value pair 2 setting=	Description
attribute= serialport1	setting=off | auto | com1 | com3 | bmcserial | bmcnic | rac | com1bmc	**off**: Disables serial port 1.
		auto: Maps serial port 1 to a COM port.
		com1: Maps serial port 1 to COM port 1.
		com3: Maps serial port 1 to COM port 3.
		bmcserial: Maps serial port 1 to BMC Serial.
		bmcnic: Maps serial port 1 to the Baseboard Management Controller (BMC) NIC.
		rac: Maps serial port 1 to the Remote Access Controller (RAC).
		com1bmc: Maps serial port 1 to COM port 1 bmc.
		NOTE: This command is applicable to select *x8xx* systems.
attribute= serialport2	setting=off | auto | com2 | com4	**off:** Disables serial port 2.
		auto: Maps serial port 2 to a COM port.
		com2: Maps serial port 2 to COM port 2.
		com4: Maps serial port 2 to COM port 4.
attribute=speaker	setting=on | off	**on**: Enables the speaker.
		off: Disables the speaker.
attribute= cputurbomode	setting=enabled | disabled	CPU turbo mode can increase the CPU frequency when your system is operating below the thermal, power, or current limits.
		enabled: Enables CPU Turbo Mode.
		disabled: Disables CPU Turbo Mode.

Table 4-3. BIOS Setup Settings (continued)

name=value pair 1 attribute=	name=value pair 2 setting=	Description
attribute=uausb	setting=on | backonly | off	**on**: Enables the user-accessible USB port(s)
		backonly: Enables only the user accessible USB port(s) located at the back of the system.
		off: Disables the user-accessible USB port(s).
attribute=usb	setting=enabled | disabled	**enabled**: Enables the USB port(s).
		disabled: Disables the USB port(s).
		NOTE: Depending on your system's hardware you can configure either usb or usbb.
attribute=usbb	setting=enabled | enabledwithbios| disabled	**enabled**: Enables the USB port(s) during system boot, without BIOS support.
		enabledwithbios: Enables the USB port(s) during the system boot, with BIOS support.
		disabled: Disables the USB port(s) during system boot.
		NOTE: Depending on your system's hardware you can configure either usb or usbb.
attribute=cstates	setting=enabled | disabled	**enabled**: Enables the processor to go into a deep sleep state when the system is not utilized.
		disabled: Disables the processor to go into a deep sleep state when the system is not utilized.

omconfig chassis currents/omconfig mainsystem currents

✍ **NOTE:** This command is no longer available through Server Administrator.

omconfig chassis fans/omconfig mainsystem fans

Use the **omconfig chassis fans** or **omconfig mainsystem fans** command to set fan probe warning thresholds. As with other components, you can view both warning and failure threshold values, but you cannot set failure thresholds. Your system manufacturer sets the minimum and maximum failure thresholds.

Valid Parameters for Fan Warning Thresholds

Table 4-4 shows the valid parameters for setting fan warning thresholds:

Table 4-4. omconfig chassis fans/omconfig chassis fans

name=value pair	Description
index=<n>	Number of the probe or probe index (must be specified).
warnthresh=default	Sets minimum and maximum warning thresholds to **default**.
minwarnthresh=<n>	Minimum warning threshold.
maxwarnthresh=<n>	Maximum warning threshold.

Default Minimum and Maximum Warning Thresholds

✍ **NOTE:** Systems that contain ESM3, ESM4, and BMC capabilities do not allow you to set warning threshold values to default values.

If you want to set both the upper and lower fan warning threshold values to the recommended default value, type:

```
omconfig chassis fans index=0 warnthresh=default
or
omconfig mainsystem fans index=0 warnthresh=
default
```

You cannot default one value and set another. In other words, if you default the minimum warning threshold value, you are also selecting the default value for the maximum warning threshold value.

Specifying a Value for Minimum and Maximum Warning Thresholds

If you prefer to specify values for the fan probe warning thresholds, you must specify the number of the probe you are configuring and the minimum and/or maximum warning threshold values. In the following example, the probe that is being configured is probe 0. The first command sets only the minimum threshold; the second sets minimum and maximum thresholds:

```
omconfig chassis fans index=0 minwarnthresh=4580
or
omconfig mainsystem fans index=0 minwarnthresh=
4580

omconfig chassis fans index=0 minwarnthresh=4580
maxwarnthresh=9160
or
omconfig mainsystem fans index=0 minwarnthresh=
4580 maxwarnthresh=9160
```

When you issue the command and the system sets the values you specify, the following message appears:

```
Fan probe warning threshold(s) set successfully.
```

NOTE: Minimum and maximum warning thresholds for the fan probe cannot be set on PowerEdge *x8xx* and *x9xx* systems.

omconfig chassis frontpanel/omconfig mainsystem frontpanel

Use the **omconfig chassis frontpanel** or **omconfig mainsystem frontpanel** command to:

- configure the power button and the Nonmasking Interrupt (NMI) button
- configure the LCD to display:
  - No information
  - Custom information
  - Default system information
  - Service tag, system name
  - Remote access MAC addresses
  - System power
  - Remote access IP address

- Ambient temperature of the system
- Remote access IPv4 address
- Remote access IPv6 address
- Specify and configure the LCD line number
- View the encryption state report of the LCD
- Configure LCD to indicate an active remote session when the Kernel-based Virtual Machine (KVM) is available

NOTE: You can configure the **Power** and **NMI** buttons only if they are present on your system.

Table 4-5 shows the valid parameters for the command.

Table 4-5.   omconfig chassis frontpanel/omconfig mainsystem frontpanel

name=value pair 1	name=value pair 2	Description
lcdindex= <index>	NA	Specifies the LCD line number.
config=none | default | custom	NA	**none**: Sets the LCD text to none. **default**: Sets the LCD text to default. **custom**: Sets the LCD text to custom.
text=<custom text>	NA	Sets the custom text for LCD when **config= custom**.
nmibutton= enable | disable	NA	**enable**: Enables the **NMI** button on the system. **disable**: Disables the **NMI** button on the system.
powerbutton= enable | disable	NA	**true**: Enables the **Power** button on the system. **false**: Disables the **Power** button on the system.
config=sysname	NA	Sets the name of the system.
config=syspower	NA	Sets the system power information.
config=servicetag	NA	Sets the system service tag information.
config= remoteaccessipv4	NA	Sets the remote access IPv4 information.
config= remoteaccessipv6	NA	Sets the remote access IPv6 information.

Table 4-5. omconfig chassis frontpanel/omconfig mainsystem frontpanel *(continued)*

name=value pair 1	name=value pair 2	Description
config= remoteaccessmac	NA	Sets the remote access MAC address.
config=ipv4idrac		Sets IPv4 DRAC information.
config=ipv6idrac		Sets IPv6 DRAC information.
config=macidrac	NA	Sets the DRAC's MAC address.
config= ambienttemp	NA	Sets the system temperature in centigrade.
security=modify	NA	Allows you to modify the LCD text.
security=view	NA	Provides read-only access to the LCD text.
security=disabled	NA	Provides limited access to the LCD text.
remoteindication =true	NA	LCD flashes when the system detects an active remote session.

NOTE: The options **ipv4idrac**, **ipv6idrac**, and **macidrac** are deprecated.

omconfig chassis info/omconfig mainsystem info

Use the **omconfig chassis info** or **omconfig mainsystem info** command to enter an asset tag name and a chassis name for your system. If your system is a modular one, you can enter asset tag names for modular components as well. Table 4-6 shows the valid parameters for the command.

Table 4-6. omconfig chassis info/omconfig mainsystem info

name=value pair	Description
index=*<n>*	Number of the chassis whose asset tag or name you are setting.
tag=*<text>*	Asset tag in the form of alphanumeric text. Letters or numbers should not exceed 10 characters.
name=*<text>*	Name of the chassis.

In the following example, the asset tag for the main system chassis is being set to **buildsys**:

```
omconfig chassis info index=0 tag=buildsys
or
omconfig mainsystem info index=0 tag=buildsys
```

Index 0 always defaults to the main system chassis. The following command omits index=*n*, but accomplishes the same thing:

```
omconfig chassis info tag=buildsys
or
omconfig mainsystem info tag=buildsys
```

An acceptable command, when executed, results in the following message:

```
Chassis info set successfully.
```

For some chassis, you can assign a different name. You cannot rename the main system chassis. In the example below, the command renames chassis 2 from **storscsi1** to **storscsia**:

```
omconfig chassis info index=2 name=storscsia
or
omconfig mainsystem info index=2 name=storscsia
```

As with other commands, the CLI issues an error message if you do not have a chassis 2 (the main chassis=0). The CLI allows you to issue commands only for the system configuration you have.

omconfig chassis leds/omconfig mainsystem leds

Use the **omconfig chassis leds** or **omconfig mainsystem leds** command to specify when to flash a chassis fault LED or chassis identification LED. This command also allows you to clear the LED of the system hard drive. Table 4-7 shows the valid parameters for the command.

Table 4-7. omconfig chassis leds/omconfig mainsystem leds

name=value pair 1	name=value pair 2	Description
index=<*n*>	NA	Number of the chassis where the LED resides (defaults to chassis 0, main system chassis).
led=fault	severity=warning | critical	Select to flash the LED either when a warning event occurs or when a critical event occurs.
led=hdfault	action=clear	Sets the number of faults for the hard drive back to zero (0).
led=identify	flash=off | on time-out=<*n*>	Sets the chassis identification LED to off or on. Set the time-out value for the LED to flash to a number of seconds.

omconfig chassis memorymode/omconfig mainsystem memorymode

Use the **omconfig chassis memorymode** or **omconfig mainsystem memorymode** command to specify the redundancy mode you want to use for your system memory in case of memory errors.

Redundant memory enables a system to switch to other available memory modules if unacceptable errors are detected in the modules that the system is currently using. The **omconfig chassis memorymode** or **omconfig mainsystem memorymode** command allows you to disable redundancy; when you disable redundancy, you instruct the system not to switch to other available memory modules when the module the system is using begins to encounter errors. To enable redundancy, choose among mirror and RAID.

Spare mode disables a bank of system memory in which a correctable memory event is detected, enables the spare bank, and copies all the data from the original bank to the spare bank. Spare bank requires at least three banks of identical memory; the operating system does not recognize the spare bank.

Mirror mode switches to a redundant copy of memory when an uncorrectable memory event is detected. After switching to the mirrored memory, the system does not switch back to the original system memory until the next reboot. The operating system does not recognize half of the installed system memory in this mode.

RAID mode provides an extra level of memory checking and error recovery at the expense of some memory capacity.

Table 4-8 shows the valid parameters for the command.

Table 4-8.   omconfig chassis memorymode/omconfig mainsystem memorymode

name=value pair 1	Description
index=<*n*>	Number of the chassis where the memory module resides (the default is chassis 0, the main system chassis).
redundancy=spare | mirror | disabled | raid5	**spare:** Disables the memory module that has a correctable memory event and copies the failing module's data to a spare bank. **disabled:** Indicates that the system is not to use other available memory modules if uncorrectable memory events are detected. **mirror:** Switches the systems to a mirrored copy of the memory if the failing module has an uncorrectable memory event. In the **mirror** mode, the operating system does not switch back to the original module until the system reboots. **raid5:** Method of system memory configuration. This is logically similar to the RAID-5 mode used in hard drive storage systems. This memory mode provides an extra level of memory checking and error recovery at the expense of some memory capacity. The RAID mode supported is RAID level 5 striping with rotational parity.
opmode=mirror | optimizer | advecc	**mirror:** Switches the systems to a mirrored copy of the memory if the failing module has an uncorrectable memory event. In the **mirror** mode, the operating system does not switch back to the original module until the system reboots. **optimizer:** Enables the DRAM controllers to operate independently in 64-bit mode and provide optimized memory performance. **advanced ECC (advecc):** Enables the two DRAM controllers to combine in 128-bit mode and provide optimized reliability. Memory that cannot be teamed by the controllers is not reported to the operating system.

omconfig chassis pwrmanagement/omconfig mainsystem pwrmanagement

Use the **omconfig chassis pwrmanagement** or **omconfig mainsystem pwrmanagement** command to configure power cap and manage profiles that control power utilization.

Table 4-9. omconfig chassis pwrmanagement/omconfig mainsystem pwrmanagement

name=value pair 1	name=value pair 2	Description
config=budget	cap=<value>	Sets the threshold value for power budget.
	setting=enable | disable	**enable**: Enables powercap settings. **disable**: Disables powercap settings.
	unit=watt | btuphr | percent	**watt**: Configure the unit in Watts. **btuphr**: Configure the unit in BTU/hr. **percent**: Configure the unit in percentage.
config=profile	profile= maxperformance| apc | osctrl | custom	**maxperformance**: Sets the processor to the highest supported processor state. It offers maximum performance mode with minimal power economy. **apc**: Active Power Control (apc) enables the demand-based power management controlled by BIOS. **osctrl**: OS Control (osctrl) enables the demand-based power management controlled by the operating system. **custom**: This profile allows you to configure individual BIOS settings. It offers added control by displaying the underlying BIOS settings.

**Table 4-9.   omconfig chassis pwrmanagement/omconfig mainsystem
pwrmanagement *(continued)***

name=value pair 1	name=value pair 2	Description
	cpupowermode=min | max | systemdbpm | osdbpm	**min**: Sets the CPU power consumption to minimum.
		max: Sets the CPU power consumption to maximum.
		systemdbpm: Sets the mode to system demand based power management.
		osdbpm: Sets the mode to operating system demand based power management.
		NOTE: These options are applicable only when a custom profile is selected.
	memorypowermode= min | 800 | 1067 | 1333 | max	**min**: Sets the mode to minimum power utilization.
		800 | 1067 | 1333: Set the mode to 800, 1067, or 1333 MHz.
		max: Sets the mode to maximum performance.
		NOTE: These options are applicable only when a custom profile is selected.
	fanmode=min | max	**min**: Sets the mode to minimum power utilization.
		max: Sets the mode to maximum performance.
		NOTE: These options are applicable only when a custom profile is selected.

NOTE: Reboot your system for the power profiles setup options to take effect.

omconfig chassis pwrmonitoring/omconfig mainsystem pwrmonitoring

Use the **omconfig chassis pwrmonitoring** or **omconfig mainsystem pwrmonitoring** command to configure power consumption information.

Table 4-10.   omconfig chassis pwrmonitoring/omconfig mainsystem pwrmonitoring

name=value pair 1	name=value pair 2	Description
index=<n>	NA	Number of the probe or probe index (must be specified).
config=probe	warnthresh= settodefault	Sets minimum and maximum warning thresholds values to **default**.
	warnthresh=<*n*>	Sets a value for the warning threshold.
	unit=watt | btuphr |	**watt**: Displays the unit in Watts. **btuphr**: Displays the unit in BTU/hr.
config=resetreading	type=energy | peakpower	**energy**: Resets the system energy reading. **peakpower**: Resets the system peak power.

NOTE: This command is applicable to select Dell *xx*0*x* systems that support PMBus only.

Default Warning Thresholds

NOTE: Sensor managing capabilities vary across systems.

If you want to set both the upper and lower power consumption probe warning threshold values to the recommended default value, type:

```
omconfig chassis pwrmonitoring config=probe index=
0 warnthresh=settodefault
or
omconfig mainsystem pwrmonitoring config=probe
index=0 warnthresh=settodefault
```

You cannot default one value and set another. If you default the minimum warning threshold value, you are also selecting the default value for the maximum warning threshold value.

Specify a Value for Warning Thresholds

If you prefer to specify values for the power consumption probe warning thresholds, you must specify the number of the probe you are configuring and the warning threshold value. You can configure the values to be displayed either in BTU/hr or Watts. In the following example, the probe that is being configured is probe 4:

```
omconfig chassis pwrmonitoring config=probe index=
4 warnthresh=325 unit=watt
or
omconfig mainsystem pwrmonitoring config=probe
index=4 warnthresh=325 unit=btuphr
```

When you issue the command and the system sets the values you specify, the following message appears:

```
Power consumption probe warning threshold(s) set
successfully.
```

omconfig chassis remoteaccess/omconfig mainsystem remoteaccess

Use the **omconfig chassis remoteaccess** or **omconfig mainsystem remoteaccess** command to configure:

- Remote access on a local area network (LAN).
- The serial port for BMC or RAC, whichever is installed.
- The BMC or RAC on a serial over LAN connection.
- Terminal settings for the serial port.
- Advanced settings for a serial over LAN connection.
- Information on a BMC or RAC user.
- Information on IPv6 and IPv4 interfaces.

    NOTE: You have to Enter the user ID to configure user information.

Type:

```
omconfig chassis remoteaccess
or
omconfig mainsystem remoteaccess
```

The output of the **omconfig chassis remoteaccess** or **omconfig mainsystem remoteaccess** command lists each of the available configurations. Table 4-11 shows the valid parameters:

Table 4-11. **omconfig chassis remoteaccess/omconfig mainsystem remoteaccess**

name=value pair 1 config=	name=value pair 2	Description
config= additional	ipv4=enable | disable	**enable**: IPv4 stack to load on iDRAC6.
		disable: IPv4 stack to flush on iDRAC6.
	ipv6=enable | disable	**enable**: Enables IPv6 stack to load on iDRAC6.
		disable: Disables IPv6 stack to unload on iDRAC6.
config=advsol	characcuminterval= number	**number**: Sets the character accumulate interval in 5 millisecond intervals.
	charsendthreshold= number	**number**: Sets the number of characters. BMC automatically sends a serial over LAN data packet that contains the number of characters as soon as this number of characters (or greater) has been accepted from the baseboard serial controller into the BMC.
config=nic	enable=true | false	**true**: Enables IPMI over LAN.
		false: Disables IPMI over LAN.
	nicselection= sharedwithfailoveronall | nic1 | teamednic1nic2 | dracnic	**sharedwithfailoveronall**: Configures the new NIC selection option.
		nic1: Enables NIC 1.
		teamednic1nic2: Enables NIC teaming functionality.
		dracnic: Enables DRAC NIC if DRAC 5 is installed.
		NOTE: The **nicselection** option is supported only on PowerEdge *x9xx* systems.
	altdnsserverv6	Validates the address of the alternate DNS server for configuration.

Table 4-11. omconfig chassis remoteaccess/omconfig mainsystem remoteaccess *(continued)*

name=value pair 1 config=	name=value pair 2	Description
	dnssourcev6=static | auto	**static**: **DNS** source is set to **static**.
		auto: **DNS** source is set to **auto**.
config=*nic* (continued)	encryptkey=text confirmencryptkey=text	**text**: Text used for encryption and confirmation of encryption. **NOTE:** The **text** option is supported only on PowerEdge *x9xx* systems.
	gateway=Gateway	**Gateway**: Sets a gateway address if you have selected **static** as the IP address source for the BMC LAN interface.
	gatewayv6=<value>	Validates the IPv6 gateway.
	enablenic=true | false	**true**: Enables DRAC NIC.
		false: Disables DRAC NIC
		NOTE: The **enablenic** option is supported on PowerEdge *x9xx* systems that have DRAC 5 installed.
	ipaddress=ip	**ip**: Sets the IP address if you have selected static as the IP address source for the BMC LAN interface.
	ipaddressv6=<IPv6 address>	Validates the IPv6 address for configuration.
	ipsource=static | dhcp | systemsoftware	**static**: Static if the IP address of the BMC LAN interface is a fixed, assigned IP address.
		dhcp: DHCP if the source of the IP address of the BMC LAN interface is the dynamic host configuration protocol.
		systemsoftware: System software if the source of the IP address of the BMC LAN interface is from the system software.
		NOTE: Not all commands may be supported on your system.

Table 4-11. omconfig chassis remoteaccess/omconfig mainsystem remoteaccess *(continued)*

name=value pair 1 config=	name=value pair 2	Description
	ipsourcev6=static | auto	**static**: IPv6 address source is set to **static**.
		auto: IPv6 address source is set to **auto**.
config=*nic* (*continued*)	privilegelevel= administrator | operator | user	**administrator**: Sets the maximum privilege level that can be accepted on a LAN channel to Administrator.
		operator: Sets the maximum privilege level that can be accepted on a LAN channel to Operator.
		user: Sets the maximum privilege level that can be accepted on a LAN channel to User.
	prefdnsserverv6= <value>	Validates the preferred DNS server for configuration.
	subnet=Subnet	Sets a subnet mask if you have selected static as the IP address source for the BMC LAN interface.
	vlanenable=true | false	**true**: Enables the virtual LAN identification.
		false: Disables the virtual LAN identification.
	vlanid=number	**number**: Virtual LAN identification in the range of 1 to 4094.
	vlanpriority=number	**number**: Priority of virtual LAN identification in the range of 0 to 7.

Table 4-11. omconfig chassis remoteaccess/omconfig mainsystem remoteaccess _(continued)_

name=value pair 1 config=	name=value pair 2	Description
config=serial	baudrate=9600 | 19200 | 38400 | 57600 | 115200	**9600:** Sets the connection speed to 9600 bits per second.
		19200: Sets the connection speed to 19200 bits per second.
		38400: Sets the volatile and non-volatile connection speed to 38400 bits per second.
		57600: Sets the volatile and non-volatile connection speed to 57600 bits per second.
		115200: Sets the volatile and non-volatile connection speed to 115200 bits per second.
		NOTE: Baud rates of 9600 and 19200 are supported on PowerEdge 1800, 1850, 2800, and 2850 systems.
		NOTE: Baud rates of 19200, 38400, and 57600 are supported on PowerEdge *x*9*xx* systems.
		NOTE: Baud rate of 115200 is supported on certain systems that have a DRAC 5 installed.
		NOTE: Baud rate of 19200, 57600, and 115200 are supported on *xx*0*x* systems that have iDRAC6 installed.
	flowcontrol=none | rtscts	**none**: No control over the flow of communication through the serial port.
		rtscts: RTS is ready to send and CTS is clear to send.

**Table 4-11.   omconfig chassis remoteaccess/omconfig mainsystem
remoteaccess *(continued)***

name=value pair 1 config=	name=value pair 2	Description
config=serial *(continued)*	mode=directbasic | directterminal | directbasicterminal | modembasic | modemterminal | modembasicterminal	**directbasic**: Type of messaging used for IPMI messaging over a serial connection.
		directterminal: Type of messaging that uses printable ASCII characters and allows a limited number of text commands over a serial connection.
		directbasicterminal: Both basic and terminal mode messaging over a serial connection.
		modembasic: Type of messaging used for IPMI messaging over a modem.
		modemterminal: Type of messaging that uses printable ASCII characters and allows a limited number of text commands over a modem.
		modembasicterminal: Both basic and terminal messaging over a modem.
		NOTE: Not all commands may be supported on the system.
	privilegelevel= administrator | operator | user	**administrator**: Sets the maximum privilege level that can be accepted on a serial connection, to Administrator.
		operator: Sets the maximum privilege level that can be accepted on a serial connection, to Operator.
		user: Sets the maximum privilege level that can be accepted on a serial connection, to User.

Table 4-11. omconfig chassis remoteaccess/omconfig mainsystem remoteaccess *(continued)*

name=value pair 1 config=	name=value pair 2	Description
config= serialoverlan	enable=true | false	**true**: Enables serial over LAN for the BMC.
		false: Disables serial over LAN for the BMC.
	baudrate=9600 | 19200 | 38400 | 57600 | 115200	**9600**: Sets the volatile and nonvolatile connection speed to 9600 bits per second.
		19200: Sets the volatile and non-volatile connection speed to 19200 bits per second.
		38400: Sets the volatile and non-volatile connection speed to 38400 bits per second.
		57600: Sets the volatile and non-volatile connection speed to 57600 bits per second.
		115200: Sets the volatile and non-volatile connection speed to 115200 bits per second.
		NOTE: Baud rates of 9600 and 19200 are supported on PowerEdge 1800, 1850, 2800, and 2850 systems.
		NOTE: Baud rates of 19200, and 57600 are supported on PowerEdge *x9xx* systems. Baud rate of 115200 is supported on certain systems that have a DRAC 5 installed.
		NOTE: Baud rate of 19200, 57600, and 115200 are supported on *xx*0*x* systems that have iDRAC6 installed.

Table 4-11.   omconfig chassis remoteaccess/omconfig mainsystem remoteaccess *(continued)*

name=value pair 1 config=	name=value pair 2	Description
	privilegelevel= administrator | operator | user	**administrator**: Sets the maximum privilege level that can be accepted on a serial over LAN channel, to Administrator.
		operator: Sets the maximum privilege level that can be accepted on a serial over LAN channel, to Operator.
		user: Sets the maximum privilege level that can be accepted on a serial over LAN channel, to User.
config= settodefault		Takes the default configuration settings.
config= terminalmode	deletecontrol=outputdel | outputbkspspbksp	**outputdel**: BMC outputs a <del> character when <bksp> or <del> is received.
		outputbkspspbksp: BMC outputs a <bksp><sp><bksp> character when <bksp> or <del> is received.
	handshakingcontrol= enabled | disabled	**enabled**: Directs the BMC to output a character sequence that indicates when its input buffer is ready to accept another command.
		disabled: Does not direct the BMC to output a character sequence that indicates when its input buffer is ready to accept another command.
	inputlinesequence=cr | null	**cr**: The console uses <CR> as a new line sequence.
		null: The console uses <NULL> as a new line sequence.
	lineediting=enabled | disabled	**enabled**: Enables line editing as a line is typed.
		disabled: Disables line editing as a line is typed.

Table 4-11. **omconfig chassis remoteaccess/omconfig mainsystem remoteaccess** *(continued)*

name=value pair 1 config=	name=value pair 2	Description
	newlinesequence=none | crlf | null | cr | lfcr | lf	**none**: BMC does not use a termination sequence.
		crlf: BMC uses <CR-LF> as a new line sequence when the BMC writes a new line to the console.
		null: BMC uses <Null> as a new line sequence when the BMC writes a new line to the console.
		cr: BMC uses <CR> as a new line sequence when the BMC writes a new line to the console.
		lfcr: BMC uses <LF-CR> as a new line sequence when the BMC writes a new line to the console.
		lf: BMC uses <LF> as a new line sequence when the BMC writes a new line to the console.
config=user	id=number enable=true | false	**id=number**: ID (in numeric format) of the user being configured.
		enable=true: Enables user.
		enable=false: Disables user.
	id=number enableserialoverlan=true | false	**id=number**: ID (in numeric format) of the user being configured.
		enableserialoverlan=true: Enables serial over LAN.
		enableserialoverlan=false: Disables serial over LAN.
		NOTE: The **enableserialoverlan** option is supported only on PowerEdge *x9xx* systems.
	id=number name=text	**id=number**: ID (in numeric format) of the user being configured.
		name=text: Name of the user.

Table 4-11.   omconfig chassis remoteaccess/omconfig mainsystem remoteaccess *(continued)*

name=value pair 1 config=	name=value pair 2	Description
	id=number newpw=text confirmnewpw=text	**id=number**: ID (in numeric format) of the user being configured.
		newpw=text: New password of the user.
		confirmnewpw=text: Confirm the new password.
	id=number serialaccesslevel= administrator | operator | user | none	**id=number**: ID (in numeric format) of the user being configured.
		serialaccesslevel=administrator: User with an ID has access privileges of an Administrator for the serial port channel.
		serialaccesslevel=operator: User with an ID has access privileges of an Operator for the serial port channel.
		serialaccesslevel=user: User with an ID has access privileges of a User for the serial port channel.
		serialaccesslevel=none: User with an ID does not have access privileges for the serial port channel.
config=user *(continued)*	id=number lanaccesslevel= administrator | operator | user | none	**id=number:** ID number of the user being configured.
		lanaccesslevel=administrator: User with an ID has access privileges of an Administrator for the LAN channel.
		lanaccesslevel=operator: User with an ID has access privileges of an Operator for the LAN channel.
		lanaccesslevel=user: User with an ID has access privileges of a user for the LAN channel.
		lanaccesslevel=none: User with an ID does not have access privileges for the LAN channel.

Table 4-11. **omconfig chassis remoteaccess/omconfig mainsystem remoteaccess** *(continued)*

name=value pair 1 config=	name=value pair 2	Description
	id=user id dracusergroup=admin | poweruser | guest | custom | none	**id=user id**: User ID of the user being configured.
		dracusergroup=admin: Enables the Administrator user privileges.
		dracusergroup=poweruser: Enables the Power User privileges.
		dracusergroup=guest: Enables the Guest user privileges.
		dracusergroup=custom: Enables the Custom User privileges.
		NOTE: See Table 4-12 for more information on **dracusergroup=custom.**
		dracusergroup=none: Does not enable user privileges.
config=user *(continued)*	id=user id extipmiusergroup=admin | operator | readonly | custom | none

NOTE: **extipmiusergroup** user group is available only on Dell *xx*0*x* modular systems. | **id=user id**: User ID of the user being configured. |
		extipmiusergroup=admin: Enables the Administrator user privileges.
		extipmiusergroup=operator: Enables the Operator privileges.
		extipmiusergroup=readonly: Enables the Read Only privileges.
		extipmiusergroup=custom: Enables the Custom User privileges.
		NOTE: Dell recommends that you use the **operator** and **readonly** options for systems with iDRAC6 Enterprise.
		NOTE: See Table 4-13 for more information on **extipmiusergroup= custom.**
		extipmiusergroup=none: Does not enable user privileges.

Table 4-12.   omconfig chassis remoteaccess config=user id=<user id> dracusergroup=custom/omconfig mainsystem remoteaccess config=user id=<user id> dracusergroup=custom

name=value pair 1	name=value pair 2	name=value pair 3	Description
config=user (continued)	id=user id dracusergroup= custom	logindrac= true | false	**true/false**: Enables/disables logging into DRAC.
		configuredrac= true | false	**true/false**: Enables/disables configuration of DRAC.
		configure users= true | false	**true/false**: Enables/disables configuration of users.
		clearlogs= true | false	**true/false**: Enables/disables log clearance.
		executeservercommands= true | false	**true/false**: Enables/disables execution of server commands.
		accessconsoleredir = true | false	**true/false**: Enables/disables access to console redirection.
		accessvirtualmedia = true | false	**true/false**: Enables/disables access to virtual media.
		testalerts= true | false	**true/false**: Enables/disables test alerts.

Table 4-13.   omconfig chassis remoteaccess config=user id=<user id> extipmiusergroup=custom/omconfig mainsystem remoteaccess config= user id=<user id> extipmiusergroup=custom

name=value pair 1	name=value pair 2	name=value pair 3	Description
config=user	id=user id extipmiusergroup= custom	loginidrac= true | false	**true/false**: Enables/disables logging into iDRAC6.
	NOTE: extipmiusergroup user group is available only on Dell *xx0x* modular systems.	configureidrac= true | false	**true/false**: Enables/disables configuration of iDRAC6.

omconfig chassis temps/omconfig mainsystem temps

Use the **omconfig chassis temps** or **omconfig mainsystem temps** command to set warning thresholds for temperature probes. As with other components, you can view both warning and failure threshold values, but you cannot set failure threshold values. Your system manufacturer sets the minimum and maximum failure threshold values.

✍ **NOTE:** Threshold values that you can set vary from one system configuration to another.

Valid Parameters for Temperature Warning Thresholds

Table 4-14 shows the valid parameters for setting temperature warning thresholds:

Table 4-14.   omconfig chassis temps/omconfig mainsystem temps

name=value pair	Description
index=*<n>*	Number of the probe or probe index (must be specified).
warnthresh=default	Sets the minimum and maximum warning threshold values to default.
minwarnthresh=*<n>*	Sets the minimum warning threshold values (1 decimal place).
maxwarnthresh=*<n>*	Sets the maximum warning threshold values (1 decimal place).

Setting Minimum and Maximum Warning Threshold Values

If you want to set both the upper and lower temperature warning threshold values to the recommended default value, type:

```
omconfig chassis temps index=0 warnthresh=default
or
omconfig mainsystem temps index=0 warnthresh=
default
```

You cannot default one value and set another. In other words, if you set the minimum warning threshold value to the default value, you are also selecting the default value for the maximum warning threshold value.

✍ **NOTE:** The capabilities for managing sensors vary by systems.

Specify a Value for Minimum and Maximum Warning Thresholds

If you want to specify values for the temperature probe warning thresholds, you must specify the number of the probe you are configuring and the minimum and/or maximum warning threshold value. In the following example, the probe that is being configured is probe 4:

```
omconfig chassis temps index=4 minwarnthresh=11.2
maxwarnthresh=58.7
or
omconfig mainsystem temps index=4 minwarnthresh=
11.2 maxwarnthresh=58.7
```

When you issue the command and the system sets the values you specify, the following message appears:

```
Temperature probe warning threshold(s) set
successfully.
```

NOTE: In PowerEdge *x8xx and x9xx* systems, warning threshold for the temperature probe can be set only for the ambient temperature.

omconfig chassis volts/omconfig mainsystem volts

Use the **omconfig chassis volts** or **omconfig mainsystem volts** command to set voltage probe warning thresholds. As with other components, you can view both warning and failure threshold values, but you cannot set failure threshold values. Your system manufacturer sets the minimum and maximum values for the failure thresholds.

Valid Parameters for Voltage Warning Thresholds

Table 4-15 shows the valid parameters for setting voltage warning threshold values.

NOTE: Threshold values that you can set vary from one system configuration to another.

Table 4-15.   omconfig chassis volts/omconfig mainsystem volts

name=value pair	Description
index=<n>	Probe index (must be specified).
warnthresh=default	Sets minimum and maximum warning threshold values to default.

Table 4-15.   omconfig chassis volts/omconfig mainsystem volts *(continued)*

name=value pair	Description
minwarnthresh=$<n>$	Sets minimum warning threshold value(3 decimal places).
maxwarnthresh=$<n>$	sets maximum warning threshold value (3 decimal places).

Default Minimum and Maximum Warning Threshold Values

If you want to set both the upper and lower voltage warning threshold values to the recommended default value, type:

```
omconfig chassis volts index=2 warnthresh=default
or
omconfig mainsystem volts index=2 warnthresh=
default
```

You cannot default one value and set another. In other words, if you default the minimum warning threshold value, you are also selecting the default value for the maximum warning threshold value.

NOTE: Systems that contain ESM3 capabilities do not allow you to set warning threshold values to default values.

Specify a Value for Minimum and Maximum Warning Thresholds

If you want to specify values for the voltage probe warning thresholds, you must specify the number of the probe you are configuring and the minimum and/or maximum warning threshold values. In the following example, the probe being configured is probe 0:

```
omconfig chassis volts index=0 minwarnthresh=1.900
maxwarnthresh=2.250
or
omconfig mainsystem volts index=0 minwarnthresh=
1.900 maxwarnthresh=2.250
```

When you issue the command and the system sets the values you specify, the following message appears:

```
Voltage probe warning threshold(s) set
successfully.
```

![NOTE icon] **NOTE:** Minimum and maximum warning threshold values for the voltage cannot be set on PowerEdge *x8xx* systems.

omconfig preferences

Use the **omconfig preferences** command to set system preferences. Use the command line to set the SNMP root password and specify the user levels able to access Server Administrator. You can also configure the Active Directory service and SNMP set operations.

omconfig preferences cdvformat

Use the **omconfig preferences cdvformat** to specify the delimiters for separating data fields reported in the custom delimited format. The valid values for delimiters are: exclamation, semicolon, at, hash, dollar, percent, caret, asterisk, tilde, question, colon, comma, and pipe.

The following example shows how to set the delimiter for separating data fields to asterisk:

```
omconfig preferences cdvformat delimiter=asterisk
```

omconfig preferences dirservice

Use the **omconfig preferences dirservice** command to configure the Active Directory service. The **<productname>oem.ini** file is modified to reflect these changes. If the "adproductname" is not present in the **<productname>oem.ini** file then a **<computername>-<productname>** default value is used. **<computername>** refers to the name of the computer running Server Administrator and **<productname>** refers to the name of the product defined in **omprv32.ini**. For Server Administrator, the product name is "omsa".

Therefore, for a computer named "myOmsa" running Server Administrator, the default name would be "myOmsa–omsa". This is the name of Server Administrator defined in Active Directory by using the snap–in tool. This name must match the name for the application object in Active Directory in order to find user privileges.

✎ **NOTE:** This command is applicable only on systems running the Windows operating system.

Table 4-16 shows the valid parameters for the command.

Table 4-16. Active Directory Service Configuration Parameters

name=value pair	Description
prodname=<text>	Specifies the product to which you want to apply the Active Directory configuration changes. **prodname** refers to the name of the product defined in **omprv32.ini**. For Server Administrator, it is "omsa".
enable=<true | false>	**true**: Enables Active Directory service authentication support and the **Active Directory Login** option on the login page.
	false: Disables Active Directory service authentication support and the **Active Directory Login** option on the login page. If the **Active Directory Login** option is not present, you can only login to the local machine accounts.
adprodname= <text>	Specifies the name of the product as defined in the Active Directory service. This name links the product with the Active Directory privilege data for user authentication.

omconfig preferences snmp

Setting the SNMP root password allows administrators to restrict access to SNMP set operations that allow important systems management interventions. You can configure the SNMP root password normally (by typing all of the parameters in one command line) or interactively.

Using the **omconfig preferences snmp** command, you can also configure SNMP set operations.

✎ **NOTE:** Due to the limitations of certain operating systems (for example, VMware ESXi), certain features may not be available with this release of OpenManage Server Administrator.

⚠ **CAUTION: Interactive mode is the more encrypted method of setting the SNMP root password. In non-interactive mode, the values you enter for the *newpw* and *confirmnewpw* options appear on your system's monitor when you type them. In the interactive mode, the values you type for passwords are masked.**

The parameters for configuring the SNMP root password are the same whether you configure it interactively or iteratively.

📝 **NOTE:** If you specify **setting=rootpw** but do not specify the other name=value pair parameters, you enter interactive mode, and the command line prompts you for the remaining values.

Table 4-17 shows the valid parameters for the command.

Table 4-17. SNMP Root Password Parameters

name=value pair	Description
setting=rootpw	Required.
oldpw=*<oldpassword>*	Enter the old SNMP root password.
newpw=*<newpassword>*	Sets the new SNMP root password.
confirmnewpw=*<newpassword>*	Confirms the new SNMP root password.

When you type omconfig preferences snmp setting=rootpw, the system prompts you to supply values for the required parameters.

When you type omconfig preferences snmp, you must supply all the parameters in the initial command line. For example:

```
omconfig preferences snmp setting=rootpw oldpw=
openmanage newpw=serveradmin confirmnewpw=
serveradmin
```

Table 4-18. SNMP Set Operations Parameters

name=value pair	Description
setting=snmpset	Required
enable=true	Allows SNMP set operations
enable=false	Disallows SNMP set operations

For example, to disallow SNMP set operations use the following command:

```
omconfig preferences snmp setting=snmpset enable=
false
```

NOTE: After executing the command to enable or disable SNMP set operations, restart services for the change to take effect. On systems running supported Microsoft Windows operating systems, restart the Windows SNMP Service. On systems running supported Red Hat Enterprise Linux and SUSE Linux Enterprise Server operating systems, restart Server Administrator services by running the `srvadmin-services.sh restart` command.

omconfig preferences useraccess

Depending on the policies of your organization, you may want to restrict the access that some user levels have to Server Administrator. The **omconfig preferences useraccess** command allows you to grant or withhold the right of users and power users to access Server Administrator.

Table 4-19 shows the valid parameters for the command.

Table 4-19. Enabling User Access for Administrators, Power Users, and Users

Command	Result	Description
omconfig preferences useraccess enable=user	Grants Server Administrator access to Users, Power Users, and Administrators.	Least restrictive form of user access.
omconfig preferences useraccess enable=poweruser	Grants Server Administrator access to Power Users and Administrators.	Excludes user level access only.
omconfig preferences useraccess enable=admin	Grants Server Administrator access to Administrators *only*.	Most restrictive form of user access.

omconfig preferences webserver

Use the **omconfig preferences webserver** command to set the encryption levels of the Server Administrator Web server and configure the URL launch point in the Server Administrator Web server environment.

Table 4-20 shows the name=value pairs you can use with this command.

Table 4-20. Configuring Webserver Preferences

name=value pair 1	name=value pair 2	Description
attribute= sslencryption	setting=autonegotiate | 128bitorhigher	**autonegotiate**: Sets the encryption levels automatically based on your web browser settings.
		128bitorhigher: Sets the encryption levels to 128-bit or higher.
attribute=seturl	host=<string> port= <value>	Enables you to configure the URL launch point in the Server Administrator Web server environment.
attribute= signalgorithm	algorithm=MD5 | SHA1 | SHA256 | SHA512	**MD5**: Sets the key signing algorithm to MD5.
		SHA1: Sets the key signing algorithm to SHA1.
		SHA256: Sets the key signing algorithm to SHA256.
		SHA512: Sets the key signing algorithm to SHA512.

For example, to set the URL launch point use the following command:

```
omconfig preferences webserver attribute=seturl
host=<name, ip, fqdn> port=<number>
```

The host input must contain a valid IPv4 or IPv6 address, or a valid hostname.

To set the signing algorithm value, use the following command:

```
omconfig preferences webserver attribute=
signalgorithm algorithm<MD5|SHA1|SHA256|SHA512>
```

For more information on configuring Web server preferences, see the *Dell OpenManage IT Assistant User's Guide*.

omconfig system/omconfig servermodule

Use the **omconfig system** or **omconfig servermodule** commands to clear logs, determine how various shutdown actions occur, set initial values or edit values for cost of ownership information, and determine how to respond to a hung operating system.

omconfig system alertaction/omconfig servermodule alertaction

You can use the **omconfig system alertaction** or **omconfig servermodule alertaction** command to determine how Server Administrator responds when a component has a warning or failure event.

> **NOTE:** Due to the limitations of certain operating systems (for example, VMware ESXi), certain features may not be available with this release of OpenManage Server Administrator.

Defining Alert Actions

An alert action is an action that you specify for your system to take when specified conditions are met. Alert actions determine in advance what actions are to be taken for warning or failure events on intrusion, fans, temperatures, voltages, power supplies, memory, and redundancy.

For example, if a fan probe on your system reads a fan RPM of 300 and your minimum warning threshold value for that fan probe is 600 RPM, then your system generates a fan probe warning. Alert action settings determine how users are notified of this event. You can also configure alert actions for temperature, voltage, and probe readings that fall within the warning or failure range.

Syntax for Setting Alert Actions

Setting an alert action requires two name=value pairs. The first name=value pair is the event type. The second name=value pair is the action to take for this event. For example, in the command:

```
omconfig system alertaction event=powersupply
broadcast=true
or
omconfig servermodule alertaction event=
powersupply broadcast=true
```

The event is a power supply failure and the action is to broadcast a message to all Server Administrator users.

Available Alert Actions

Table 4-21 shows the alert actions for each component that allows you to configure an alert action.

Table 4-21.   Alert Actions You Can Set for Warning and Failure Events

Alert Action Setting	Description
alert=true | false	**true**: Enables your system's console alert. When enabled, the monitor attached to the system from which you are running Server Administrator displays a visual alert message.
	false: Disables your system's console alert.
broadcast=true | false	**true**: Enables a message or alert to be broadcast to all users who have an active terminal (or Remote Desktop) session (Windows) or to operators that have an active shell on the local system (Linux).
	false: Disables alert broadcasts.
clearall=true	Clears all actions for this event.
execappath=<string>	Sets the fully qualified path and file name of the application you want to execute in case of an event for the component described in this window.
	NOTE: On Linux systems, user/user groups upgraded to administrator/administrator groups cannot configure this alert action setting.
execapp=false	Disables the executable application.

Components and Events for Which You Can Set Alert Actions

Table 4-22 lists the components and the events for which you can set alert actions. Components are listed in alphabetical order, except that warning events always precede failure events for a component.

Table 4-22.   Events for Which You Can Set Alert Actions

Event Name	Description
event=batterywarn	Sets actions when a battery probe detects a warning value.
event=batteryfail	Sets actions when a battery probe detects a failure value.

Table 4-22. Events for Which You Can Set Alert Actions *(continued)*

Event Name	Description
event=fanwarn	Sets actions when a fan probe detects a warning value.
event=fanfail	Sets actions when a fan probe detects a failure value.
event=hardwarelogwarn	Sets actions when a hardware log detects a warning value.
event=hardwarelogfull	Sets actions when a hardware log is full.
event=intrusion	Sets actions when a chassis intrusion event is detected.
event=memprefail	Sets actions when a memory probe detects a prefailure value.
event=memfail	Sets actions when a memory probe detects a failure value.
event=systempeakpower	Sets actions when a power consumption probe detects peak power value.
event=systempowerwarn	Sets actions when a power consumption probe detects a warning value.
event=systempowerfail	Sets actions when a power consumption probe detects a failure value.
event=powersupply	Sets actions when a power supply probe detects a failure value.
event=powersupplywarn	Sets actions when a power supply probe detects a warning value.
event=processorwarn	Sets actions when a processor probe detects a warning value.
event=processorfail	Sets actions when a processor probe detects a failure value.
event=redundegrad	Sets actions when a redundant component becomes inoperative, resulting in less than full redundancy for that component.
event=redunlost	Sets actions when one or more redundant components become inoperative, resulting in a lost or a "no redundant components working" condition for that component.
event=tempwarn	Sets actions when a temperature probe detects a warning value.
event=tempfail	Sets actions when a temperature probe detects a failure value.
event=voltwarn	Sets actions when a voltage probe detects a warning value.
event=voltfail	Sets actions when a voltage probe detects a failure value.

Table 4-22. Events for Which You Can Set Alert Actions *(continued)*

Event Name	Description
event=watchdogasr	Sets actions that Server Administrator performs on the next system startup after a watchdog Automatic System Recovery (ASR) is performed for a hung operating system.
event= removableflashmediapresent	Sets actions that Server Administrator performs when the system detects a removable flash media.
event= removableflashmediaremoved	Sets actions that Server Administrator performs when a removable flash media is removed.
event= removableflashmediafail	Sets actions that Server Administrator performs when a removable flash media fails.
event=storagesyswarn	Sets actions when a storage system detects a warning value.
event=storagesysfail	Sets actions when a storage system detects a failure value.
event=storagectrlwarn	Sets actions when a storage controller detects a warning value.
event=storagectrlfail	Sets actions when a storage controller detects a failure value.
event=pdiskwarn	Sets actions when a physical disk detects a warning value.
event=pdiskfail	Sets actions when a physical disk detects a failure value.
event=vdiskwarn	Sets actions when a virtual disk detects a warning value.
event=vdiskfail	Sets actions when a virtual disk detects a failure value.
event=enclosurewarn	Sets actions when an enclosure detects a warning value.
event=enclosurefail	Sets actions when an enclosure detects a failure value.
event=storagectrlbatterywarn	Sets actions when a storage controller battery detects a warning value.
event=storagectrlbatteryfail	Sets actions when a storage controller battery detects a failure value.

NOTE: storagectrlbatterywarn and storagectrlbatteryfail events are not available on modular systems.

Example Set Alert Action Commands

The examples below are valid example commands. For each successful command issued, the following message appears:

```
Alert action(s) configured successfully.
```

Example Current Probe Actions

To disable system console alert if a current probe detects a warning event, type:

```
omconfig system alertaction event=currentwarn
alert=false
or
omconfig servermodule alertaction event=
currentwarn alert=false
```

To enable broadcast messages if a current probe detects a failure event, type:

```
omconfig system alertaction event=currentfail
broadcast=true
or
omconfig servermodule alertaction event=
currentfail broadcast=true
```

Example Fan Probe Actions

To generate alerts when a fan probe detects a failure value, type:

```
omconfig system alertaction event=fanfail alert=
true
or
omconfig servermodule alertaction event=fanfail
alert=true
```

Example Chassis Intrusion Actions

To clear all alert actions for chassis intrusion, type:

```
omconfig system alertaction event=intrusion
clearall=true
or
omconfig servermodule alertaction event=intrusion
clearall=true
```

Commands for Clearing Logs

📝 **NOTE:** For more information about alert messages, see the *Dell OpenManage Server Administrator Messages Reference Guide*.

You can use the **omconfig system** or **omconfig servermodule** command to clear three logs: the alert log, the command log, and the hardware or ESM log.

To clear the contents of the alert log, type:

```
omconfig system alertlog action=clear
or
omconfig servermodule alertlog action=clear
```

📝 **NOTE:** Entering an invalid RAC user name may prevent the command log from displaying. Clearing the command log resolves this condition.

To clear the contents of the command log, type:

```
omconfig system cmdlog action=clear
or
omconfig servermodule cmdlog action=clear
```

To clear the contents of the ESM log, type:

```
omconfig system esmlog action=clear
or
omconfig servermodule esmlog action=clear
```

omconfig system pedestinations/omconfig servermodule pedestinations

Use the **omconfig system pedestinations** or **omconfig servermodule pedestinations** command to set IP addresses for alert destinations.

Table 4-23 shows the valid parameters for the command.

📝 **NOTE:** You can either specify the index and IP address as parameters together or you can set the only community string as a parameter.

📝 **NOTE:** Index 1 to 4 accepts an IPv4 address and index 5 to 8 accepts an IPv6 address.

Table 4-23.   omconfig system pedestinations/omconfig servermodule pedestinations

name=Value Pair	Description
destenable=true | false	**true**: Enables an individual platform event filter destination after a valid IP address has been set.
	false: Disables an individual platform event filter.
index=number	Sets the index for the destination.
ipaddress=ipv4|ipv6 address	Sets the IP address for the destination.
communitystr=text	Sets the text string that acts as a password and is used to authenticate SNMP messages sent between the BMC and the destination management station.

omconfig system platformevents/omconfig servermodule platformevents

Use the **omconfig system platformevents** or **omconfig servermodule platformevents** command to configure shutdown action, if any, to be taken for a specific platform event. You can also enable or disable platform event filter alert generation.

⚠ **CAUTION: If you set a platform event shutdown action to anything other than *none* or *power reduction*, your system is forcefully shutdown when the specified event occurs. This shutdown is initiated by firmware and is carried out without first shutting down the operating system or any of the applications running on your system.**

Table 4-24 shows the valid parameters for the command.

📝 **NOTE:** Alert settings are mutually exclusive and can be set one at a time only. The action settings are also mutually exclusive and can be set one at a time only. However, alert and action settings are not mutually exclusive of each other.

Table 4-24.   Parameters for Alert Action Command

Action	Description
alert=disable	Disables the SNMP alert.
alert=enable	Enables the SNMP alert to be sent.
action=none	Takes no action when the system is hung or has crashed.
action=powercycle	Turns off the electrical power to the system, pauses, turns the power on, and reboots the system.
action=poweroff	Turns off the electrical power to the system.

Table 4-24.   Parameters for Alert Action Command *(continued)*

Action	Description
action= powerreduction	Reduces the processor speed until the power consumption comes down and reaches below the warning threshold. If the system power consumption stays below the warning threshold, increases the processor speed **NOTE:** This action is applicable only to non–modular systems.
action=reboot	Forces the operating system to shut down and initiates system startup, performs BIOS checks, and reloads the operating system.

Table 4-25 lists the components and the events for which you can set platform events. Components are listed in alphabetical order, except that warning events always precede failure events for a component.

Table 4-25.   omconfig system platformevents

Event Name	Description
alertsenable=true | false	**true**: Enables generation of platform event filter alerts. **false**: Disables generation of platform event filter alerts. **NOTE:** This setting is independent of the individual platform event filter alert settings. For a platform event filter to generate an alert, both the individual alert and the global event alert must be enabled.
event=batterywarn	Sets action or enables/disables alert generation when a battery device detects that the battery is pending a failure condition.
event=batteryfail	Sets action or enables/disables alert generation when a battery device detects that the battery has failed.
event=discretevolt	Sets action or enables/disables alert generation when a discrete voltage probe detects that the voltage is too low for proper operation.
event=fanfail	Sets action or enables/disables alert generation when a fan probe detects that the fan is running too slow or not at all.
event=hardwarelogfail	Enables/disables alert generation when a hardware log detects a failure value.

Table 4-25. omconfig system platformevents *(continued)*

Event Name	Description
event=intrusion	Sets action or enables/disables alert generation when a chassis is opened.
event=powerwarn	Sets action or enables/disables alert generation when a power device probe detects that the power supply, voltage regulator module, or DC to DC converter is pending a failure condition.
event=powerabsent	Sets action or enables/disables alert generation when a processor probe detects that the power supply is absent.
event=powerfail	Sets action or enables/disables alert generation when a power device probe detects that the power supply, voltage regulator module, or DC to DC converter has failed.
event=processorwarn	Sets action or enables/disables alert generation when a processor probe detects that the processor is running at less than peak performance or speed.
event=processorfail	Sets action or enables/disables alert generation when a processor probe detects that the processor has failed.
event=processorabsent	Sets action or enables/disables alert generation when a processor probe detects that the processor is absent.
event=redundegrad	Sets action or enables/disables alert generation when the system fans and/or power supplies become inoperative, resulting in less than full redundancy for that component.
event=redunlost	Sets action or enables/disables alert generation when the system fans and/or power supplies become inoperative, resulting in a lost or a *no redundant components working* condition for that component.
event=systempowerwarn	Sets actions when a power consumption probe detects a warning value.
event=systempowerfail	Sets actions when a power consumption probe detects a failure value.
event=tempwarn	Sets action or enables/disables alert generation when a temperature probe detects that the temperature is approaching the maximum high or low limits.

Table 4-25.   omconfig system platformevents *(continued)*

Event Name	Description
event= removableflashmediapresent	Sets actions that Server Administrator performs when the system detects a removable flash media.
event= removableflashmediaremoved	Sets actions that Server Administrator performs when a removable flash media is removed.
event= removableflashmediafail	Sets actions that Server Administrator performs when a removable flash media fails.
event=tempfail	Sets action or enables/disables alert generation when a temperature probe detects that the temperature is either too high or low for proper operation.
event=voltfail	Sets action or enables/disables alert generation when a voltage probe detects that the voltage is too low for proper operation.
event=watchdogasr	Enables or disables alert generation configured by the ASR when the system has hung or is not responding.

omconfig system events/omconfig servermodule events

Use the **omconfig system events** or **omconfig servermodule events** command to enable and disable SNMP traps for the components on your system.

📝 **NOTE:** Not all event types may be present on your system.

There are four parameters in the name=value pair component of the **omconfig system events** command:

- Source
- Type
- Severity
- Index

Source

At present, `source=snmptraps` is a required name=value pair because SNMP is currently the only supported source of event notification for your system's components.

```
omconfig system events source=snmptraps
or
omconfig servermodule events source=snmptraps
```

Type

Type refers to the name of the component(s) involved in the event. Table 4-26 shows the valid parameters for system event types.

Table 4-26.   System Event Type Parameters

name=value pair	Description
type=accords	Configures events for AC power cords.
type=battery	Configures events for battery.
type=all	Configures events for all device types.
type=fanenclosures	Configures events for fan enclosures.
type=fans	Configures events for fans.
type=intrusion	Configures events for chassis intrusion.
type=log	Configures events for logs.
type=memory	Configures events for memory.
type=powersupplies	Configures events for power supplies.
type=redundancy	Configures events for redundancy.
type=systempower	Configures events for system power.
type=temps	Configures events for temperatures.
type=volts	Configures events for voltages.
type=systempeakpower	Configures events for system peak power.
type=removableflashmedia	Configures events for removable flash media.

Severity

In the context of configuring events, severity determines how severe an event must be before Server Administrator notifies you of the event for a component type. When there are multiple components of the same type in the same system chassis, you can specify whether you want to be notified for event severity according to the number of the component by using the index=<*n*> parameter. Table 4-27 shows the valid severity parameters.

Table 4-27. System Event Severity Parameters

Command	Result	Description
omconfig system events type=<*component name*> severity=info or omconfig servermodule events type=<*component name*> severity=info	Enables notification for informational, warning, and critical events.	Least restrictive form of event notification.
omconfig system events type=<*component name*> severity= warning or omconfig servermodule events type=<*component name*> severity=warning	Enables notification for warning and critical events.	Omits informational event notification, for example, when a component returns to normal status.
omconfig system events type=<*component name*> severity= critical or omconfig servermodule events type=<*component name*> severity=critical	Enables notification for critical events only.	Restrictive form of event notification.
omconfig system events type=<*component name*> severity= none or omconfig servermodule events type=<*component name*> severity=none	Disables event notification.	No event notification.

Index

Index refers to the number of an event for a particular component. Index is an optional parameter. When you omit the index parameter, events are configured for all components of the specified type, such as all fans. For example, when a system contains more than one fan, you can enable or disable event notification for a particular fan. An example command is as follows:

```
omconfig system events type=fan index=0 severity=
critical
or
omconfig servermodule events type=fan index=0
severity=critical
```

As a result of the example command, Server Administrator sends an SNMP trap only when the first fan in the system chassis (index 0) has reached critical fan RPMs.

omconfig system webserver/omconfig servermodule webserver

Use the **omconfig system webserver** or **omconfig servermodule webserver** command to start or stop the Web server. Table 4-28 shows the valid parameters for the command.

Table 4-28.   Web Server Configuration Parameters

name=value pair	Description
action=start	Starts the Web server.
action=stop	Stops the Web server.
action=restart	Restarts the Web server.

omconfig system recovery/omconfig servermodule recovery

Use the **omconfig system recovery** or **omconfig servermodule recovery** command to set the action to be taken when the operating system hangs or crashes. You can also set the number of seconds that must pass before the system is considered to have a hung operating system. Table 4-29 shows the valid parameters for the command.

NOTE: Upper and lower limits for the timer are dependent on your system model and configuration.

Table 4-29.   Recovery Parameters

name=value pair	Description
action=none	Takes no action when the operating system is hung or has crashed.
action=reboot	Shuts down the operating system and initiates system startup, performing BIOS checks, and reloading the operating system.
action=poweroff	Turns off electrical power to the system.
action=powercycle	Turns off electrical power to the system, pauses, turns the power on, and reboots the system. Power cycling is useful when you want to re-initialize system components such as hard drives.
timer=<n>	Number of seconds that must pass before the operating system in a system is considered hung operating system (from 20 seconds to 480 seconds).

Example Recovery Commands

To set the action on hung operating system detection to powercycle, type:

```
omconfig system recovery action=powercycle
or
omconfig servermodule recovery action=powercycle
```

To set the amount of time that the system must be hung before a recovery action is initiated to 120 seconds, type:

```
omconfig system recovery timer=120
or
omconfig servermodule recovery timer=120
```

omconfig system shutdown/omconfig servermodule shutdown

Use the **omconfig system shutdown** or **omconfig servermodule shutdown** command to determine the way in which the system shuts down. During system shutdown, the default is to shut down the operating system before powering off the system. Shutting down the operating system first closes down the file system before powering the system down. If you do not want to shut down the operating system first, use the **osfirst=false** parameter. Table 4-30 shows the valid parameters for the command.

NOTE: Due to the limitations of certain operating systems (for example, VMware ESXi), certain features may not be available with this release of OpenManage Server Administrator.

Table 4-30.   Shutdown Parameters

name=value pair	Description
action=reboot	Shuts down the operating system and initiates system startup, performing BIOS checks and reloading the operating system.
action=poweroff	Turns off the electrical power to the system.
action=powercycle	Turns off the electrical power to the system, pauses, turns the power on, and reboots the system. Power cycling is useful when you want to re-initialize system components such as hard drives.
osfirst=true | false	**true**: Closes the file system and exits the operating system before shutting down the system.
	false: Does not close the file system or shut down the operating system before shutting down the system.

Example Shutdown Commands

To set the shutdown action to reboot, type:

```
omconfig system shutdown action=reboot
or
omconfig servermodule shutdown action=reboot
```

To bypass operating system shutdown before the system is powered off, type:

```
omconfig system shutdown action=reboot osfirst=
false
or
omconfig servermodule shutdown action=reboot
osfirst=false
```

omconfig system thrmshutdown/omconfig servermodule thrmshutdown

Use the **omconfig system thrmshutdown** or **omconfig servermodule thrmshutdown** command to configure a thermal shutdown action. A thermal shutdown can be configured to occur when a temperature probe detects a temperature probe warning or failure event.

Table 4-31 shows the valid parameters for the command.

Table 4-31.   Thermal Shutdown Parameters

name=value pair	Description
severity= disabled | warning | failure	**disabled**: Disable thermal shutdown. An administrator must intervene.
	warning: Perform a shutdown when a temperature warning event is detected. A warning event occurs when any temperature probe inside a chassis reads a temperature (in degrees Celsius) that exceeds the maximum temperature warning threshold value.
	failure: Perform a shutdown when a temperature failure event is detected. A failure event occurs when any temperature probe inside a chassis reads a temperature (in degrees Celsius) that exceeds the maximum temperature failure threshold value.

Example Thermal Shutdown Commands

To trigger a thermal shutdown when a temperature probe detects a failure event, type:

```
omconfig system thrmshutdown severity=failure
or
omconfig servermodule thrmshutdown severity=
failure
```

To disable thermal shutdown so that an administrator has to initiate an **omconfig system shutdown**, type:

```
omconfig system thrmshutdown severity=disabled
or
omconfig servermodule thrmshutdown severity=
disabled
```

5

omconfig system or servermodule assetinfo: Editing Cost of Ownership Values

The **omconfig system assetinfo** or **omconfig servermodule assetinfo** command helps you to edit a comprehensive set of parameters that make up the total cost of ownership of your system. This section explains the parameters that can be reported and configured under the **omconfig system assetinfo** or **omconfig servermodule assetinfo** command.

Using the **omconfig system assetinfo** or **omconfig servermodule assetinfo** command, you can set governing values for configurable objects. Examples of **assetinfo** configuration capabilities include setting values for system owner, purchase price, details of any lease that is in effect, depreciation methods and rates, and location of the system, warranty and extended warranty duration, outsourcing details, and service level agreement.

User Level Required for Adding Asset Information

Power Users and Administrators can add and edit asset information.

Table 5-1.   System Availability for the omconfig Command

Command Level 1	Command Level 2	Applicable to
omconfig	servermodule	Modular system
	mainsystem	Modular system
	system	Non-modular system
	chassis	Non-modular system

Adding Acquisition Information

Acquisition refers to the facts about a business entity's purchase or lease of a system. Use the **omconfig system assetinfo info=acquisition** or **omconfig servermodule assetinfo info=acquisition** command to add detailed information about the purchase or lease of a system. Table 5-2 shows the valid parameters for the command.

Table 5-2. omconfig system assetinfo info=acquisition/omconfig servermodule assetinfo info=acquisition

Command Level 1	Command Level 2	Command Level 3	Name= Value Pair 1	Name= Value Pair 2	Description
omconfig					
	system/server module				
		assetinfo			
			info= acquisition		
				costcenter= *<text>*	The name or code for the business entity that acquired the system.
				expensed=yes | no	Whether the system is charged to a specific purpose or department such as research and development or sales.
				installdate= *<mmddyy>*	Date the system was put to service.
				ponum=*<n>*	Number of the document that authorized payment for the system.
				purchasecost= *<n>*	Price the owner paid for the system.
				purchasedate= *<mmddyy>*	Date the owner purchased the system.
				signauth= *<text>*	Name of the person who approved the purchase or the service call on the system.
				waybill=*<n>*	Receipt from the carrier for the goods received.

Example Commands for Adding Acquisition Information

To provide a value for an acquisition parameter, type a command of the form: **omconfig system assetinfo info=acquisition** *<name=value pair 2>* or **omconfig servermodule assetinfo info=acquisition** *<name=value pair 2>*. For example, type:

```
omconfig system assetinfo info=acquisition
purchasedate=122101
or
omconfig servermodule assetinfo info=acquisition
purchasedate=122101
```

The following message appears:

```
Asset information set successfully.
```

You can type more than one **omconfig system assetinfo** or **omconfig servermodule assetinfo** command at the same time, as long as all of the parameters for name=value pair 2 belong to the same name=value pair 1. For example, if you want to type more than one parameter value for **info= acquisition**, use the following example as a syntax guide:

```
omconfig system assetinfo info=acquisition
purchasecost=5000
waybill=123456 installdate=120501 purchasedate=
050601 ponum=9999 signauth="John Smith" expensed=
yes costcenter=finance
or
omconfig servermodule assetinfo info=acquisition
purchasecost=5000
waybill=123456 installdate=120501 purchasedate=
050601 ponum=9999 signauth="John Smith" expensed=
yes costcenter=finance
```

The following message appears:

```
Asset information set successfully.
```

Adding Depreciation Information

Depreciation is a set of methods for computing the devaluation of your asset over time. For example, the depreciation of a system that is expected to have a useful life of 5 years would be 20 percent. Use the **omconfig system assetinfo info=depreciation** or **omconfig servermodule assetinfo info= depreciation** command to add details about how your system's depreciation is to be computed. Table 5-3 shows the valid parameters for the command.

Table 5-3. omconfig system assetinfo info=depreciation/omconfig servermodule assetinfo info=depreciation

Command Level 1	Command Level 2	Command Level 3	Name= Value Pair 1	Name= Value Pair 2	Description
omconfig					
	system/server module				
		assetinfo			
			info= depreciation		
				duration= $<n>$	Number of years or months over which a system is depreciated.
				method= $<text>$	Steps and assumptions used to compute the system's depreciation.
				percent= $<n>$	Portion of 100 that an asset is devalued or depreciated.
				unit=months | years	Unit is months or years.

Example Commands for Adding Depreciation Information

To provide a value for a depreciation parameter, type a command of the form: **omconfig system assetinfo info=depreciation** *<name=value pair 2>* or **omconfig servermodule assetinfo info=depreciation** *<name=value pair 2>*. For example, type:

```
omconfig system assetinfo info=depreciation
method=straightline
or
omconfig servermodule assetinfo info=depreciation
method=straightline
```

The following message appears:

```
Asset information set successfully.
```

You can type more than one **omconfig system assetinfo** or **omconfig servermodule assetinfo** command at the same time, as long as all the parameters for name=value pair 2 belong to the same name=value pair 1. For an example, see "Example Commands for Adding Acquisition Information" on page 155.

Adding Extended Warranty Information

Use the **omconfig system extwarranty** or **omconfig servermodule extwarranty** command to assign values for extended warranty information. A warranty is a contract between the manufacturer or dealer and the purchaser of a system. The warranty identifies the components that are covered for repair or replacement for a specified length of time or usage. The extended warranty comes into force after the original warranty expires. For details on how to edit warranty values, see "Adding Warranty Information" on page 169.

Table 5-4 shows the valid parameters for the command.

Table 5-4. **omconfig system assetinfo info=extwarranty/omconfig servermodule assetinfo info=extwarranty**

Command Level 1	Command Level 2	Command Level 3	Name= Value Pair 1	Name= Value Pair 2	Description
omconfig					
	system/server module				
		assetinfo			
			info= extwarranty		
				cost= <cost>	Cost of the extended warranty service.
				enddate= <enddate>	Date the extended warranty agreement ends.
				provider= <provider>	Business entity that provides the extended warranty service.
				startdate= <startdate>	Date the extended warranty service begins.

Example Command for Adding Extended Warranty Information

To provide a value for an extended warranty parameter, type a command of the form: **omconfig system assetinfo info=extwarranty** *<name=value pair 2>* or **omconfig servermodule assetinfo info=extwarranty** *<name=value pair 2>*. For example, type:

```
omconfig system assetinfo info=extwarranty
enddate=012503
or
omconfig servermodule assetinfo info=extwarranty
enddate=012503
```

The following message appears:

```
Asset information set successfully.
```

You can type more than one **omconfig system assetinfo** or **omconfig servermodule assetinfo** command at the same time, as long as all the parameters for name=value pair 2 belong to the same name=value pair 1. For an example, see "Example Commands for Adding Acquisition Information" on page 155.

Adding Lease Information

A lease is an agreement to pay for the use of a system for a specified period of time. The lessor retains ownership of the system. Table 5-5 shows the valid parameters for the command.

Table 5-5.   omconfig system assetinfo info=lease/omconfig servermodule assetinfo info=lease

Command Level 1	Command Level 2	Command Level 3	Name=Value Pair 1	Name= Value Pair 2	Description
omconfig					
	system/server module				
		assetinfo			
			info=lease		
				buyout= <amount>	Amount of money paid to purchase a system from a lessor.
				lessor= <lessor>	Business entity that is leasing the system out.
				multischedule =true | false	Whether cost of leasing the system is computed by more than one rate schedule.
				ratefactor= <factor>	Factor used to calculate the lease payment.
				value= <residual>	Fair market value of the system at the end of the lease period.

Example Command for Adding Lease Information

To provide a value for a lease parameter, type a command of the form:
omconfig system assetinfo info=lease *<name=value pair 2>* or
omconfig servermodule assetinfo info=lease *<name=value pair 2>*.
For example, type:

```
omconfig system assetinfo info=lease value=4500
or
omconfig servermodule assetinfo info=lease value=
4500
```

The following message appears:

```
Asset information set successfully.
```

You can type more than one **omconfig system assetinfo** or **omconfig servermodule assetinfo** command at the same time, as long as all the parameters for name=value pair 2 belong to the same name=value pair 1. For an example, see "Example Commands for Adding Acquisition Information" on page 155.

Adding Maintenance Information

Maintenance refers to activities required to keep the system in good working order. Table 5-6 shows the valid parameters for adding maintenance information.

Table 5-6.   omconfig system assetinfo info=maintenance/omconfig servermodule assetinfo info=maintenance

Command Level 1	Command Level 2	Command Level 3	Name= Value Pair 1	Name= Value Pair 2	Description
omconfig					
	system/server module				
		assetinfo			
			info= maintenance		
				enddate= *<enddate>*	Date the extended warranty agreement ends.

Table 5-6. **omconfig system assetinfo info=maintenance/omconfig servermodule assetinfo info=maintenance** *(continued)*

Command Level 1	Command Level 2	Command Level 3	Name= Value Pair 1	Name= Value Pair 2	Description
				provider= <*provider*>	Business entity providing the maintenance service.
				startdate= <*startdate*>	Date the maintenance begins.
				restrictions= <*string*>	Activities not covered by the maintenance contract.

Example Command for Adding Maintenance Information

To provide a value for a maintenance parameter, type a command of the form: **omconfig system assetinfo info=maintenance** *<name=value pair 2>* or **omconfig system assetinfo info=maintenance** *<name=value pair 2>*. For example, type:

```
omconfig system assetinfo info=maintenance
startdate=012504
or
omconfig servermodule assetinfo info=maintenance
startdate=012504
```

The following message appears:

```
Asset information set successfully.
```

You can type more than one **omconfig system assetinfo** or **omconfig servermodule assetinfo** command at the same time, as long as all the parameters for name=value pair 2 belong to the same name=value pair 1. For an example, see "Example Commands for Adding Acquisition Information" on page 155.

Adding Outsource Information

Outsourcing is the practice of contracting with another business to maintain the system in good working order. Table 5-7 shows the valid parameters for adding outsource information.

Table 5-7.   omconfig system assetinfo info=outsource/omconfig servermodule assetinfo info=outsource

Command Level 1	Command Level 2	Command Level 3	Name= Value Pair 1	Name= Value Pair 2	Description
omconfig					
	system/server module				
		assetinfo			
			info= outsource		
				levels=$<n>$	Levels of service that the provider offers.
				problemcomponent =$<component>$	System component that requires maintenance.
				providerfee= $<providerfee>$	Amount of money charged for maintenance.
				servicefee= $<servicefee>$	Amount of money charged for service.
				signauth=$<name>$	Person who signed or authorized the service.

Example Command for Adding Outsource Information

To provide a value for an outsource parameter, type a command of the form:
omconfig system assetinfo info=outsource <*name=value pair 2*> or
omconfig servermodule assetinfo info=outsource <*name=value pair 2*>.
For example, type:

```
omconfig system assetinfo info=outsource
providerfee=75
or
omconfig servermodule assetinfo info=outsource
providerfee=75
```

The following message appears:

```
Asset information set successfully.
```

You can type more than one **omconfig system assetinfo** or **omconfig servermodule assetinfo** command at the same time, as long as all the parameters for name=value pair 2 belong to the same name=value pair 1. For an example, see "Example Commands for Adding Acquisition Information" on page 155.

Adding Owner Information

The owner is the party that holds legal property title to the system. Table 5-8 shows the valid parameters for adding owner information.

Table 5-8. omconfig system assetinfo info=owner/omconfig servermodule assetinfo info=owner

Command Level 1	Command Level 2	Command Level 3	Name=Value Pair 1	Name= Value Pair 2	Description
omconfig					
	system/server module				
		assetinfo			
			info= owner		
				insuranceco = <company>	Name of the insurance company that insures the system.
				ownername = <business>	Business entity that owns the system.
				type=owned | leased | rented	Whether the user of the system owns, leases, or rents the system.

Example Command for Adding Owner Information

To provide a value for an owner parameter, type a command of the form:
omconfig system assetinfo info=owner <*name=value pair 2*> or
omconfig servermodule assetinfo info=owner <*name=value pair 2*>.
For example, type:

```
omconfig system assetinfo info=owner type=rented
or
omconfig servermodule assetinfo info=owner type=
rented
```

The following message appears:

```
Asset information set successfully.
```

You can type more than one **omconfig system assetinfo** or **omconfig servermodule assetinfo** command at the same time, as long as all the parameters for name=value pair 2 belong to the same name=value pair 1. For an example, see "Example Commands for Adding Acquisition Information" on page 155.

Adding Service Contract Information

A service contract is an agreement that specifies fees for preventive maintenance and repair of the system. Table 5-9 shows the valid parameters for adding contract information.

Table 5-9. omconfig system assetinfo info=service/omconfig servermodule assetinfo info=service

Command Level 1	Command Level 2	Command Level 3	Name= Value Pair 1	Name= Value Pair 2	Description
omconfig					
	system/server module				
		assetinfo			
			info= service		
				renewed= true | false	Whether the service agreement has been renewed.
				type= *<string>*	Type of service that the contract covers.
				vendor= *<business>*	Business entity that offers service on the system.

Example Command for Adding Service Information

To provide a value for a service parameter, type a command of the form:
omconfig system assetinfo info=service *<name=value pair 2>* or
omconfig system assetinfo info=service *<name=value pair 2>*.
For example, type:

```
omconfig system assetinfo info=service vendor=
fixsystemco
or
omconfig servermodule assetinfo info=service
vendor=fixsystemco
```

The following message appears:

```
Asset information set successfully.
```

You can type more than one **omconfig system assetinfo** or **omconfig servermodule assetinfo** command at the same time, as long as all the parameters for name=value pair 2 belong to the same name=value pair 1. For an example, see "Example Commands for Adding Acquisition Information" on page 155.

Adding Support Information

Support refers to technical assistance that the system user can seek when the user seeks guidance on the proper use of a system to perform tasks. Table 5-10 shows the valid parameters for adding support information.

Table 5-10. omconfig system assetinfo info=support/omconfig servermodule assetinfo info=support

Command Level 1	Command Level 2	Command Level 3	Name= Value Pair 1	Name= Value Pair 2	Description
omconfig					
	system/server module				
		assetinfo			
			info= support		
				automaticfix= <*programname*>	Name of any application used to fix a problem automatically.
				helpdesk= <*text*>	The help desk name or contact information such as a phone number, e-mail address, or website address.

Table 5-10.   omconfig system assetinfo info=support/omconfig servermodule assetinfo info=support *(continued)*

Command Level 1	Command Level 2	Command Level 3	Name= Value Pair 1	Name= Value Pair 2	Description
				outsourced=true | false	Whether an external business entity provides technical support or the system owner's employees provide technical support.
				type=network | storage	Whether support is for network attached devices or for storage devices.

Example Command for Adding Support Information

To provide a value for a support parameter, type a command of the form:
omconfig system assetinfo info=support *<name=value pair 2>* or
omconfig servermodule assetinfo info=support *<name=value pair 2>*.
For example, type:

```
omconfig system assetinfo info=support outsourced=
true
or
omconfig servermodule assetinfo info=support
outsourced=true
```

The following message appears:

```
Asset information set successfully.
```

You can type more than one **omconfig system assetinfo** or **omconfig servermodule assetinfo** command at the same time, as long as all the parameters for name=value pair 2 belong to the same name=value pair 1. For an example, see "Example Commands for Adding Acquisition Information" on page 155.

Adding System Information

System information includes the primary user of the system, the phone number for the primary user, and the location of the system. Table 5-11 shows the valid parameters for adding system information.

Table 5-11.   omconfig system assetinfo info=system/omconfig servermodule assetinfo info=system

Command Level 1	Command Level 2	Command Level 3	Name= Value Pair 1	Name= Value Pair 2	Description
omconfig					
	system/server module				
		assetinfo			
			info= system		
				location=<text>	Location of the system.
				primaryphone= <n>	Phone number of the primary user of the system.
				primaryuser= <user>	Primary user of the system.

Example Command for Adding System Information

To provide a value for a system parameter, type a command of the form: **omconfig system assetinfo info=system** <*name=value pair 2*> or **omconfig servermodule assetinfo info=system** <*name=value pair 2*>. For example, type:

```
omconfig system assetinfo info=system location=
firstfloor
or
omconfig servermodule assetinfo info=system
location=firstfloor
```

The following message appears:

```
Asset information set successfully.
```

You can type more than one **omconfig system assetinfo** or **omconfig servermodule assetinfo** command at the same time, as long as all the parameters for name=value pair 2 belong to the same name=value pair 1. For an example, see "Example Commands for Adding Acquisition Information" on page 155.

Adding Warranty Information

Use the **omconfig system warranty** or **omconfig servermodule warranty** command to assign values for warranty information. A warranty is a contract between the manufacturer or dealer and the purchaser of a system. The warranty identifies the components that are covered for repair or replacement for a specified length of time or usage. For details on editing extended warranty values, see "Adding Extended Warranty Information" on page 157. Table 5-12 shows the valid parameters for adding warranty information.

Table 5-12.   omconfig system assetinfo info=warranty/omconfig servermodule assetinfo info=warranty

Command Level 1	Command Level 2	Command Level 3	Name= Value Pair 1	Name= Value Pair 2	Description
omconfig					
	system/server module				
		assetinfo			
			info= warranty		
				cost= <cost>	Cost of the warranty service.
				duration= <duration>	Number of days or months that the warranty is in force.
				enddate= <enddate>	Date the warranty agreement ends.
				unit=days | months	Whether the number for duration refers to days or months.

Example Command for Adding Warranty Information

To provide a value for a warranty parameter, type a command of the form:
omconfig system assetinfo info=warranty *<name=value pair 2>* or
omconfig servermodule assetinfo info=warranty *<name=value pair 2>*.
For example, type:

```
omconfig system assetinfo info=warranty unit=days
or
omconfig servermodule assetinfo info=warranty
unit=days
```

The following message appears:

```
Asset information set successfully.
```

You can type more than one **omconfig system assetinfo** or **omconfig servermodule assetinfo** command at the same time, as long as all the parameters for name=value pair 2 belong to the same name=value pair 1. For an example, see "Example Commands for Adding Acquisition Information" on page 155.

6

Using the Storage Management Service

The CLI of Storage Management enables you to perform reporting, configuration, and management functions of Storage Management from an operating system command shell. The Storage Management CLI also enables you to script command sequences.

The Storage Management CLI provides expanded options for the Dell OpenManage Server Administrator **omreport** and **omconfig** commands. For more information, see the *Dell OpenManage Server Administrator Installation Guide* and *Dell OpenManage Management Station Software Installation Guide*. See the Storage Management online Help or the *Dell OpenManage Server Administrator Storage Management User's Guide* for more information on Storage Management.

CLI Command Syntax

Like all Server Administrator commands, the **omreport** and **omconfig** command syntax consists of specifying command *levels*. The first command level is the command name: **omreport** or **omconfig**. Subsequent command levels provide a greater degree of specification regarding the type of object on which the command operates or the information that the command displays.

For example, the following **omconfig** command syntax has three levels:

```
omconfig storage pdisk
```

Table 6-1 describes these command levels.

Table 6-1.   Example Command Levels

Command level 1	Command level 2	Command level 3	Use
omconfig			Specifies the command
	storage		Indicates the Server Administrator service (in this case, Storage Management) that implements the command
		pdisk	Specifies the type of object on which the command operates

Following the command levels, the **omreport** and **omconfig** command syntax may require one or more name=value pairs. The name=value pairs specify exact objects (such as a specific physical disk) or options (such as `blink` or `unblink`) that the command implements.

For example, the following **omconfig** command syntax for blinking a physical disk has three levels and three name=value pairs:

```
omconfig storage pdisk action=blink controller=id
pdisk=<PDISKID>
```

where PDISKID=<connector:enclosureID:targetID | connector:targetID>

In this example, the *id* in `controller=id` is the controller number such that controller 1 would be specified as controller=1.

Syntax for Required, Optional, and Variable Command Elements

The **omreport** and **omconfig** commands have multiple name=value pairs. These name=value pairs may include required, optional, and variable parameters. Table 6-2 describes the syntax used to indicate these parameters.

Table 6-2. Syntax For Name=Value Pairs For Parameters

Syntax	Description
controller=id	Indicates the controller ID as reported by the **omreport storage controller** command. To obtain these values, type `omreport storage controller` to display the controller IDs and then type `omreport storage pdisk controller=id` to display the IDs for the physical disks attached to the controller. For example, the **controller=id** parameter might be specified as **controller=1**.
connector=id	Indicates the connector ID as reported by the **omreport** command. To obtain this value, type `omreport storage controller` to display the controller IDs and then type `omreport storage connector controller=id` to display the IDs for the connectors attached to the controller. For example, the **connector=id** parameter might be specified as **connector=2**.
vdisk=id	Indicates the virtual disk ID as reported by the **omreport** command. To obtain this value, type `omreport storage controller` to display the controller IDs and then type `omreport storage vdisk controller=id` to display the IDs for the virtual disks on the controller. For example, the **vdisk=id** parameter might be specified as **vdisk=3**.
enclosure= <ENCLOSUREID>	Indicates a particular enclosure by specifying either **enclosure= connector** or **enclosure=connector:enclosureID**. To obtain these values, type `omreport storage controller` to display the controller IDs and then type `omreport storage enclosure controller=id` to display the IDs for the enclosures attached to the controller.
pdisk=<PDISKID>	Indicates a particular physical disk by specifying either **connector:targetID** or **connector:enclosureID:targetID**. To obtain the values for the connector, enclosure, and physical disk (targetID), type `omreport storage controller` to display the controller IDs and then type `omreport storage pdisk controller=id` to display the IDs for the physical disks attached to the controller.

Table 6-2. Syntax For Name=Value Pairs For Parameters *(continued)*

Syntax	Description
battery=id	Indicates the battery ID as reported by the **omreport** command. To obtain this value, type `omreport storage controller` to display the controller IDs and then type `omreport storage battery controller=id` to display the ID for the controller battery.
< >	The caret symbols (< >) enclose variable elements that you must specify. For example, the **name=<string>** parameter might be specified as **name=VirtualDisk1.**
[ ]	The bracket symbols ([ ]) indicate optional elements that you can choose whether or not to specify. For example, when creating a virtual disk, the [**name= <string>**] parameter indicates that you have the option of specifying the virtual disk name. If you omit this parameter from the syntax, then a default name for the virtual disk is chosen for you.
|	The pipe symbol (|) separates two or more options from which one only must be selected. For example, when creating a virtual disk, the **cachepolicy=d|c** indicates that the cache policy must be specified as either **cachepolicy=d** or **cachepolicy=c**.

User Privileges for omreport storage and omconfig storage

Storage Management requires Administrator privileges to use the **omconfig storage** command. User and Power User privileges are sufficient to use the **omreport storage** command.

7

omreport storage Commands

The **omreport** command allows you to view storage component information for disks, controllers, enclosures, batteries, global storage properties, connectors and cachecades that are part of your storage system.This chapter explains how to get reports with the level of detail that you want.

Commands documented in this chapter vary in whether they define the fields that appear in the results of a particular omreport command. Fields are defined only if they have a special or less familiar use.

The following sections provide the **omreport** command syntax required to display the information of various storage components.

To see a list of valid commands for **omreport storage**, type:

```
omreport storage -?
```

Table 7-1 provides the **omreport storage** command syntax.

Table 7-1.   omreport storage help

Command Level 1	Command Level 2	Command Level 3	Use
omreport			
	storage		Displays a list of storage components for which **omreport** commands are available.
		pdisk	Displays a list of the **omreport storage pdisk** parameters for displaying physical disk information.
		vdisk	Displays a list of **omreport storage vdisk** parameters for displaying virtual disk information.
		controller	Displays a list of the **omreport storage controller** parameters for displaying controller information.
		enclosure	Displays a list of the **omreport storage enclosure** parameters for displaying enclosure information.

Table 7-1.   omreport storage help *(continued)*

Command Level 1	Command Level 2	Command Level 3	Use
		battery	Displays a list of the **omreport storage battery** parameters for displaying battery information.
		globalinfo	Displays a list of the **omreport storage globalinfo** parameters for displaying global storage property information.
		connector	Displays a list of the **omreport storage connector** parameters for displaying connector information.
		cachecade	Displays a list of the **omreport storage cachecade** parameters for displaying cachecade properties. **NOTE:** The cachecade feature will be available from first half of calendar year 2011.

omreport Physical Disk Status

Table 7-2 describes the syntax for the **omreport Physical Disk** Commands.

Table 7-2.   omreport Physical Disk Commands

Required Command Levels (1, 2, 3) and name=value pair	Optional name=value pairs	Use
omreport storage pdisk	**controller=id** where *id* is the controller number. For example: controller=0	Displays all physical disks attached to the specified controller. **NOTE:** If a physical disk was replaced by another disk as part of the replace member operation, the state of the physical disk is displayed as `Replacing`.
	vdisk=id where *id* is the virtual disk number. For example: vdisk=1	Displays all physical disks included in the specified virtual disk on the controller.

Table 7-2. omreport Physical Disk Commands *(continued)*

Required Command Levels (1, 2, 3) and name=value pair	Optional name=value pairs	Use
	cachecade=id where *id* is the cachecade number. For example: cachecade=1	Displays all physical disks included in the specified cachecade on the controller. **NOTE:** The cachecade feature will be available from first half of calendar year 2011.
	connector=id where *id* is the connector number. For example: connector=1	Displays all physical disks attached to the specified connector on the controller.
	pdisk=connectorID : targetID | connectorID : enclosureID : slotID where *connectorID:targetID* is the connector number and the physical disk number and *connectorID:enclosureID:slotID* is the connector number, enclosure number, and slot number. For example: pdisk=0:2 or pdisk=0:1:2	Displays the specified physical disk on the specified connector on the controller.

omreport Virtual Disk Status

Table 7-3 describes the syntax for the **omreport Virtual Disk** Commands.

Table 7-3.   omreport Virtual Disk Commands

Required Command Levels (1, 2, 3)	Optional name=value pairs	Use
omreport storage vdisk		Displays property information for all virtual disks on all controllers.
	controller=id where *id* is the controller number. For example: controller=0.	Displays all virtual disks on the specified controller.
	controller=id vdisk=id where *id* is the controller number and the virtual disk number. For example: controller=0 vdisk=1.	Displays the specified virtual disk on the controller.

omreport Controller Status

Table 7-4 describes the syntax for the **omreport Controller** Commands.

Table 7-4.   omreport Controller Commands

Required Command Levels (1, 2, 3)	Optional name=value pairs	Use
omreport storage controller		Displays property information for all controllers attached to the system.
	controller=id where *id* is the controller number. For example: controller=0	Displays the specified controller and all attached components such as enclosures, virtual disks, physical disks, and so on.
	controller=id info=foreignkeyids	Displays the locked foreign configuration information for import or clear operations.
	controller=id **info=pdslotreport**	Displays the empty and occupied slot details of enclosures in the controller.
		NOTE: This command is not supported on Blackplane, SCSI, and SWRAID controllers.

omreport Enclosure Status

Table 7-5 describes the syntax for the **omreport Enclosure** Commands.

Table 7-5.   omreport Enclosure Commands

Required Command Levels (1, 2, 3)	Optional name=value pairs	Use
omreport storage enclosure		Displays property information for all enclosures attached to the system.
	controller=id where *id* is the controller number	Displays all enclosures connected to the controller.
	controller=id enclosure= <ENCLOSUREID> where *id* is the controller number and **<ENCLOSUREID>** is the enclosure ID. Example for SCSI controllers: controller=0 enclosure=2. Example for SAS controllers: controller=0 enclosure= 1:2.	Displays the specified enclosure and its components.

The following sections provide the omreport storage enclosure command syntax required to execute the enclosure commands.

omreport Temperature Probe Status

Table 7-6 describes the syntax for the **omreport Probe** Commands.

Table 7-6.   omreport Temperature Probe Commands

Required Command Levels (1, 2, 3) and name=value pair	Optional name=value pairs	Use
omreport storage enclosure		Displays property information for all enclosures attached to the system.
	controller=id enclosure= <ENCLOSUREID> info=temps where *id* is the controller number and **<ENCLOSUREID>** is the enclosure ID. Example for SCSI controllers: controller=0 enclosure=2 info=temps. Example for SAS controllers: controller=0 enclosure= 1:2 info=temps.	Displays the temperature probes for the specified enclosure.
	controller=id enclosure= <ENCLOSUREID> info=temps index=n where *id* is the controller number and **<ENCLOSUREID>** is the enclosure number and "n" is the number of a temperature probe. For example: controller=0 enclosure=2 info=temps index=1	Displays the temperature probes for the specified enclosure.

omreport Fan Status

Table 7-7 describes the syntax for the **omreport Fan** Commands.

Table 7-7. omreport Fan Status

Required Command Levels (1, 2, 3) and name=value pair	Optional name=value pairs	Use
omreport storage enclosure		Displays property information for all enclosures attached to the system.
	controller=id enclosure= <ENCLOSUREID> info=fans	Displays the fans for the specified enclosure.
	where id is the controller number and ENCLOSUREID is the enclosure number. For example: controller=0 enclosure=2	
	NOTE: For SCSI controllers, the ID specified in enclosure= <ENCLOSUREID> is the connector number and for Serial Attached SCSI (SAS) controllers, ID is the connectorNumber:EnclosureIndex.	
	controller=id enclosure= <ENCLOSUREID> info=fans index=n	Displays the specified fan.
	where id is the controller number and ENCLOSUREID is the enclosure number and "n" is the number of a fan. For example: controller=0 enclosure=2 info=fans index=1	

omreport Power Supply Status

Table 7-8 describes the syntax for the **omreport Power Supply** Commands.

Table 7-8.   omreport Power Supply Commands

Required Command Levels (1, 2, 3) and name=value pair	Optional name=value pairs	Use
omreport storage enclosure		Displays property information for all enclosures attached to the system.
	controller=id enclosure= <ENCLOSUREID> info=pwrsupplies where id is the controller number and ENCLOSUREID is the enclosure number. For example: controller=0 enclosure=2	Displays the power supplies for the specified enclosure.
	controller=id enclosure= <ENCLOSUREID> info=pwrsupplies index=n where id is the controller number and ENCLOSUREID is the enclosure number and "n" is the number of a power supply. For example: controller=0 enclosure=2 info= pwrsupplies index=1	Displays the specified power supply.

omreport EMM Status

📝 **NOTE:** The status of the EMMs is displayed as degraded if there is a mismatch between the EMM firmware.

Table 7-9 describes the syntax for the **omreport EMM** Commands.

Table 7-9.   omreport EMM Commands

Required Command Levels (1, 2, 3) and name=value pair	Optional name=value pairs	Use
omreport storage enclosure		Displays property information for all enclosures attached to the system.
	controller=id enclosure=<ENCLOSUREID> info=emms where id is the controller number and ENCLOSUREID is the enclosure number. For example: controller=0 enclosure=2	Displays the enclosure management modules (EMMs) for the specified enclosure.
	controller=id enclosure=<ENCLOSUREID> info=emms index=n where id is the controller number and ENCLOSUREID is the enclosure number and "n" is the number of an EMM. For example: controller=0 enclosure=2 info=emms index=1	Displays the specified EMMs.

omreport Enclosure Slot Occupancy Report

Table 7-10 describes the syntax for the **omreport Enclosure Slot Occupancy Report** Commands.

Table 7-10. omreport Enclosure Slot Occupancy Report Commands

Required Command Levels (1, 2, 3) and name=value pair	Optional name=value pairs	Use
omreport storage enclosure		Displays property information for all enclosures attached to the system.
	controller=id enclosure= <ENCLOSUREID> info=pdslotreport	Displays the empty and occupied slot details for the specified enclosure.
	where id is the controller number and ENCLOSUREID is the enclosure number. For example: controller=0 enclosure=2	**NOTE:** This command is not supported on Blackplane, SCSI, and SWRAID controllers.

omreport Battery Status

Table 7-11 describes the syntax for the **omreport Battery** Commands.

Table 7-11. omreport Battery Commands

Required Command Levels (1, 2, 3)	Optional name=value pairs	Use
omreport storage battery		Displays all batteries present on all controllers on the system (Some controllers do not have batteries.).
	controller=id where id is the controller number. For example: controller=0	Displays the battery on the specified controller.
	controller=id battery=id where id is the controller number. For example: controller=0	Displays the specified battery.

omreport Global Information (Smart Thermal Shutdown Status, Hot Spare Protection Policy)

Table 7-12 describes the syntax for the **omreport Global Information** Commands.

Table 7-12.   omreport Global Information Commands

Required Command Levels (1, 2, 3)	Optional name= value pairs	Use
omreport storage globalinfo		Displays whether smart thermal shutdown is enabled or disabled. See the "**omconfig Global Enable Smart Thermal Shutdown**" on page 252 command for more information.
		Displays the hot spare protection policy that you have set. See the *Dell OpenManage Server Administrator Storage Management User's Guide* for more information on setting hot spare protection policy.

omreport Connector Status

Table 7-13 describes the syntax for the **omreport Connector** Commands.

Table 7-13. **omreport Connector Commands**

Required Command Levels (1, 2, 3)	Optional name= value pairs	Use
omreport storage connector		Displays all connectors present on all controllers on the system.
		NOTE: This command works only when the controller ID is specified.
	controller=id where *id* is the controller number. For example: controller=0	Displays the connectors on the specified controller.
	controller =id **connector=id** where *id* is the connector number. For example: connector=0	Displays the specified connector. **NOTE:** When the connectors are connected to the enclosure in redundant path mode, the **Name** of the connector is displayed as **Logical Connector**.

omreport Cachecade Status

Table 7-14 describes the syntax for the **omreport Cachecade** Commands.

NOTE: The cachecade feature will be available from first half of calendar year 2011.

Table 7-14. omreport Virtual Disk Commands

Required Command Levels (1, 2, 3)	Optional name=value pairs	Use
omreport storage cachecade		Displays property information for all cachecades on all controllers.
	controller=id where *id* is the controller number. For example: controller=0.	Displays all cachecades on the specified controller.
	controller=id cachecade=id where *id* is the controller number and the cachecade number. For example: controller=0 cachecade=1.	Displays the specified cachecade on the controller.

8

omconfig storage Commands

The **omconfig** commands allows you to configure physical disks, virtual disks, controllers, enclosures, batteries, global information, connectors, and cachecades.

The following sections provide the **omconfig** command syntax required to display the status of various storage components.

To see a list of valid commands for **omconfig storage**, type:

```
omconfig storage -?
```

Table 8-1 provides the **omconfig storage** command syntax.

Table 8-1.   omconfig storage help

Command Level 1	Command Level 2	Command Level 3	Use
omconfig			
	storage		Sets the storage component properties for which **omconfig** commands are available.
		pdisk	Displays the list of **omconfig storage pdisk** parameters for configuring physical disks.
		vdisk	Displays the list of **omconfig storage vdisk** parameters for configuring virtual disks.
		controller	Displays a list of the **omconfig storage controller** parameters for configuring controllers.
		enclosure	Displays a list of the **omconfig storage enclosure** parameters for configuring enclosures.
		battery	Displays a list of the **omconfig storage battery** parameters for configuring batteries.
		globalinfo	Displays a list of the **omconfig storage globalinfo** parameters for configuring global storage properties.

Table 8-1.   omconfig storage help *(continued)*

Command Level 1	Command Level 2	Command Level 3	Use
		connector	Displays a list of the **omreport storage connector** parameters for configuring connectors.
		cachecade	Displays a list of the **omconfig storage cachecade** parameters for configuring cachecades.
			NOTE: The cachecade feature will be available from first half of calendar year 2011.

omconfig Physical Disk Commands

The following sections provide the **omconfig** command syntax required to execute physical disk tasks.

Table 8-2.   omconfig Physical Disk Commands

Required Command Levels (1, 2, 3)	Optional name=value pairs
omconfig storage pdisk	
	action=blink controller=id pdisk=<PDISKID>
	action=unblink controller=id pdisk=<PDISKID>
	action=remove controller=id pdisk=<PDISKID>
	action=instantsecureerase controller=id pdisk=<PDISKID>
	action=initialize controller=id pdisk=<PDISKID>
	action=offline controller=id pdisk=<PDISKID>
	action=online controller=id pdisk=<PDISKID>
	action=assignglobalhotspare controller=id pdisk=<PDISKID> assign=<yes|no>
	action=rebuild controller=id pdisk=<PDISKID>
	action=cancelrebuild controller=id pdisk=<PDISKID>
	action=cancelreplacemember controller=id pdisk=<PDISKID>
	action=clear controller=id pdisk=<PDISKID>
	action=cancelclear controller=id pdisk=<PDISKID>

omconfig Blink Physical Disk

You can blink the light (light emitting diode or LED display) on one or more physical disks attached to a controller. Use the following **omconfig** command syntax to blink one or more physical disks.

Complete Syntax

```
omconfig storage pdisk action=blink controller=id
pdisk=<PDISKID>
```

where *id* is the controller ID. The **<PDISK>** variable specifies the physical disk.

To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage pdisk controller=ID** to display the IDs for the physical disks attached to the controller.

Example Syntax

In this example, you want to blink physical disk 0 on connector 0 of controller 1. On a SAS controller, the physical disk resides in enclosure 2.

Example for SCSI, SATA, and ATA Controllers

To blink the physical disk described in this example, type:

```
omconfig storage pdisk action=blink controller=1
pdisk=0:0
```

Example for SAS Controllers

To blink the physical disk described in this example, type:

```
omconfig storage pdisk action=blink controller=1
pdisk=0:2:0
```

omconfig Unblink Physical Disk

You can unblink the light (light emitting diode or LED display) on one or more physical disks attached to a controller. Use the following **omconfig** command syntax to unblink one or more physical disks.

Complete Syntax

```
omconfig storage pdisk action=unblink controller=
id pdisk=<PDISKID>
```

where *id* is the controller ID. The **<PDISK>** variable specifies the physical disk.

To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage pdisk controller=ID** to display the IDs for the physical disks attached to the controller.

Example Syntax

In this example, you want to unblink physical disk 0 on connector 0 of controller 1. On a SAS controller, the physical disk resides in enclosure 2.

Example for SCSI, SATA, and ATA Controllers

To unblink the physical disk described in this example, type:

```
omconfig storage pdisk action=unblink controller=1
pdisk=0:0
```

Example for SAS Controllers

To unblink the physical disk described in this example, type:

```
omconfig storage pdisk action=unblink controller=1
pdisk=0:2:0
```

omconfig Prepare to Remove Physical Disk

Use the following **omconfig** command syntax to prepare a physical disk for removal:

Complete Syntax

```
omconfig storage pdisk action=remove controller=id
pdisk=<PDISKID>
```

where *id* is the controller ID. The **<PDISK>** variable specifies the physical disk.

To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage pdisk controller=ID** to display the IDs for the physical disks attached to the controller.

Example Syntax

In this example, you want to prepare physical disk 3 on connector 0 of controller 1 for removal. On a SAS controller, the physical disk resides in enclosure 2.

Example for SCSI, SATA, and ATA Controllers

To prepare to remove the physical disk described in this example, type:

```
omconfig storage pdisk action=remove controller=1
pdisk=0:3
```

Example for SAS Controllers

To prepare to remove the physical disk described in this example, type:

```
omconfig storage pdisk action=remove controller=1
pdisk=0:2:3
```

omconfig Instant Erase Secured Physical Disk

Use the following **omconfig** command syntax to erase the given encrypted disk:

Complete Syntax

```
omconfig storage pdisk action=instantsecureerase
controller=id pdisk=<PDISKID>
```

where *id* is the controller ID. The **<PDISK>** variable specifies the physical disk.

To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage pdisk controller=ID** to display the IDs for the physical disks attached to the controller.

Example Syntax

In this example, you want to erase physical disk 3 on connector 0 of controller 1. On a SAS controller, the physical disk resides in enclosure 2.

Example for SCSI, SATA, and ATA Controllers

To erase the physical disk described in this example, type:

```
omconfig storage pdisk action=instantsecureerase
controller=1 pdisk=0:3
```

Example for SAS Controllers

To erase the physical disk described in this example, type:

```
omconfig storage pdisk action=remove controller=1
pdisk=0:2:3
```

omconfig Initialize Physical Disk

Use the following **omconfig** command syntax to initialize a physical disk.

Complete Syntax

```
omconfig storage pdisk action=initialize
controller=id pdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

Example Syntax

To initialize physical disk 4 on controller 1, type:

```
omconfig storage pdisk action=initialize
controller=1 pdisk=4
```

omconfig Offline Physical Disk

Use the following **omconfig** command syntax to offline a physical disk:

Complete Syntax

```
omconfig storage pdisk action=offline controller=
id pdisk=<PDISKID>
```

where *id* is the controller ID. The **<PDISK>** variable specifies the physical disk.

To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage pdisk controller=ID** to display the IDs for the physical disks attached to the controller.

Example Syntax

In this example, you want to offline physical disk 3 on connector 0 of controller 1. On a SAS controller, the physical disk resides in enclosure 2.

Example for SCSI, SATA, and ATA Controllers

To offline the physical disk described in this example, type:

```
omconfig storage pdisk action=offline controller=1
pdisk=0:3
```

Example for SAS Controllers

To offline the physical disk described in this example, type:

```
omconfig storage pdisk action=offline controller=1
pdisk=0:2:3
```

omconfig Online Physical Disk

Use the following **omconfig** command syntax to bring an offline physical disk back online.

Complete Syntax

```
omconfig storage pdisk action=online controller=id
pdisk=<PDISKID>
```

where *id* is the controller ID. The **<PDISK>** variable specifies the physical disk.

To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage pdisk controller=ID** to display the IDs for the physical disks attached to the controller.

Example Syntax

In this example, you want to bring physical disk 3 on connector 0 of controller 1 back online. On a SAS controller, the physical disk resides in enclosure 2.

Example for SCSI, SATA, and ATA Controllers

To bring the physical disk described in this example back online, type:

```
omconfig storage pdisk action=online controller=1
pdisk=0:3
```

Example for SAS Controllers

To bring the physical disk described in this example back online, type:

```
omconfig storage pdisk action=online controller=1
pdisk=0:2:3
```

omconfig Assign Global Hot Spare

Use the following **omconfig** command syntax to assign a physical disk as a global hot spare.

Complete Syntax

```
omconfig storage pdisk action=assignglobalhotspare
controller=id pdisk=<PDISKID> assign=yes
```

where *id* is the controller ID. The **<PDISK>** variable specifies the physical disk.

To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage pdisk controller=ID** to display the IDs for the physical disks attached to the controller.

Example Syntax

In this example, you want to assign physical disk 3 on connector 0 of controller 1 as a global hot spare. On a SAS controller, the physical disk resides in enclosure 2.

Example for SCSI, SATA, and ATA Controllers

To assign the physical disk described in this example as a global hot spare, type:

```
omconfig storage pdisk action=assignglobalhotspare
controller=1 pdisk=0:3 assign=yes
```

Example for SAS Controllers

To assign the physical disk described in this example as a global hot spare, type:

```
omconfig storage pdisk action=assignglobalhotspare
controller=1 pdisk=0:2:3 assign=yes
```

omconfig Rebuild Physical Disk

Use the following **omconfig** command syntax to rebuild a failed physical disk. Rebuilding a disk may take several hours. If you need to cancel the rebuild, use the **Cancel Rebuild** task. See the *Dell OpenManage Online Help* for more information about Rebuild Physical Disk.

Complete Syntax

```
omconfig storage pdisk action=rebuild controller=
id pdisk=<PDISKID>
```

where *id* is the controller ID. The **<PDISK>** variable specifies the physical disk.

To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage pdisk controller=ID** to display the IDs for the physical disks attached to the controller.

Example Syntax

In this example, you want to rebuild physical disk 3 on connector 0 of controller 1. On a SAS controller, the physical disk resides in enclosure 2.

Example for SCSI, SATA, and ATA Controllers

To rebuild the physical disk described in this example, type:

```
omconfig storage pdisk action=rebuild controller=1
pdisk=0:3
```

Example for SAS Controllers

To rebuild the physical disk described in this example, type:

```
omconfig storage pdisk action=rebuild controller=1
pdisk=0:2:3
```

omconfig Cancel Rebuild Physical Disk

Use the following **omconfig** command syntax to cancel a rebuild that is in progress. If you cancel a rebuild, the virtual disk remains in a degraded state. See the *Dell OpenManage Online Help* for more information about Cancel Rebuild Physical Disk.

Complete Syntax

```
omconfig storage pdisk action=cancelrebuild
controller=id pdisk=<PDISKID>
```

where *id* is the controller ID. The **<PDISK>** variable specifies the physical disk.

To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage pdisk controller=ID** to display the IDs for the physical disks attached to the controller.

Example Syntax

In this example, you want to cancel the rebuild or physical disk 3 on connector 0 of controller 1. On a SAS controller, the physical disk resides in enclosure 2.

Example for SCSI, SATA, and ATA Controllers

To cancel the rebuild of the physical disk described in this example, type:

```
omconfig storage pdisk action=cancelrebuild
controller=1 pdisk=0:3
```

Example for SAS Controllers

To cancel the rebuild of the physical disk described in this example, type:

```
omconfig storage pdisk action=cancelrebuild
controller=1 pdisk=0:2:3
```

omconfig Cancel Replace Member

Use the following **omconfig** command syntax to cancel a replace member operation.

Complete Syntax

```
omconfig storage pdisk action=cancelreplacemember
controller=id pdisk=<PDISKID>
```

where *id* is the physical disk IDs as reported by the **omreport** command.

Example Syntax

To cancel replace member operation on disk 0:0:1 which is connected to controller 0, type:

```
omconfig storage pdisk action=cancelreplacemember
controller=0 pdisk=0:0:1
```

omconfig Clear Physical Disk

Use the following **omconfig** command to clear data or a configuration from a physical disk.

Complete Syntax

```
omconfig storage pdisk action=clear controller=id
pdisk=<PDISKID>
```

where *id* is the controller ID. The **<PDISK>** variable specifies the physical disk.

To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage pdisk controller=ID** to display the IDs for the physical disks attached to the controller.

Example Syntax

In this example, you want to clear physical disk 3 on connector 0 of controller 1. On a SAS controller, the physical disk resides in enclosure 2.

Example for SAS Controllers

To clear the physical disk described in this example, type:

```
omconfig storage pdisk action=clear controller=1
pdisk=0:2:3
```

omconfig Cancel Clear Physical Disk

Use the following **omconfig** command to cancel a clear operation in progress on a physical disk.

Complete Syntax

```
omconfig storage pdisk action=cancelclear
controller=id pdisk=<PDISKID>
```

where *id* is the controller ID. The **<PDISK>** variable specifies the physical disk.

To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage pdisk controller=ID** to display the IDs for the physical disks attached to the controller.

Example Syntax

In this example, you want to cancel the clear of physical disk 3 on connector 0 of controller 1. On a SAS controller, the physical disk resides in enclosure 2.

Example for SAS Controllers

To cancel the clear of the physical disk described in this example, type:

```
omconfig storage pdisk action=cancelclear
controller=1 pdisk=0:2:3
```

omconfig Virtual Disk Commands

The following sections provide the **omconfig** command syntax required to execute virtual disk tasks.

⚠ **CAUTION: The *omconfig storage vdisk action=deletevdisk controller=id vdisk=id* command deletes a virtual disk. Deleting a virtual disk destroys all information including file systems and volumes residing on the virtual disk.**

Table 8-3.   omconfig Manage Virtual Disk Commands

Required Command Levels (1, 2, 3)	Optional name=value pairs
omconfig storage vdisk	
	action=checkconsistency controller=id vdisk=id
	action=cancelcheckconsistency controller=id vdisk=id
	action=pausecheckconsistency controller=id vdisk=id
	action=resumecheckconsistency controller=id vdisk=id
	action=blink controller=id vdisk=id
	action=unblink controller=id vdisk=id
	action=initialize controller=id vdisk=id
	action=fastinit controller=id vdisk=id [force=yes]
	action=slowinit controller=id vdisk=id [force=yes]
	action=cancelinitialize controller=id vdisk=id
	action=cancelbginitialize controller=id vdisk=id
	action=assigndedicatedhotspare controller=id vdisk=id pdisk=<PDISKID> assign=<yes | no>
	action=deletevdisk controller=id vdisk=id [force=yes]
	action=format controller=id vdisk=id
	action=reconfigure controller=id vdisk=id raid=<c | r0 | r1 | r1c | r5 | r10> pdisk=<PDISKID> [size=<size> vdcapacityexpansion=yes sizeinpercent=<1 to 100>]
	action=securevd controller=id vdisk=id
	action=clearvdbadblocks controller=id vdisk=id
	action=changepolicy controller=id vdisk=id [readpolicy=<ra | nra | ara | rc | nrc> | writepolicy=<wb | wt | wc | nwc | fwb> | cachepolicy=<d | c> **diskcachepolicy=<enabled|disabled>**]

Table 8-3. omconfig Manage Virtual Disk Commands *(continued)*

Required Command Levels (1, 2, 3)	Optional name=value pairs
	action=replacememberdisk controller=id vdisk=id source=*<PDISKID>* destination=*<PDISKID>*
	action=rename controller=id vdisk=id

omconfig Check Consistency

Use the following **omconfig** command syntax to initiate a check consistency on a virtual disk. The check consistency task verifies the virtual disk's redundant data.

Complete Syntax

```
omconfig storage vdisk action=checkconsistency
controller=id vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

Example Syntax

To run a check consistency on virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=checkconsistency
controller=1 vdisk=4
```

omconfig Cancel Check Consistency

Use the following **omconfig** command syntax to cancel a check consistency while in progress.

Complete Syntax

```
omconfig storage vdisk action=
cancelcheckconsistency controller=id vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

Example Syntax

To cancel a check consistency on virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=
cancelcheckconsistency controller=1 vdisk=4
```

omconfig Pause Check Consistency

Use the following **omconfig** command syntax to pause a check consistency while in progress. See the *Dell OpenManage Online Help* for more information about **Pause Check Consistency**.

Complete Syntax

```
omconfig storage vdisk action=
pausecheckconsistency controller=id vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

Example Syntax

To pause a check consistency on virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=
pausecheckconsistency controller=1 vdisk=4
```

omconfig Resume Check Consistency

Use the following **omconfig** command syntax to resume a check consistency after it has been paused.

Complete Syntax

```
omconfig storage vdisk action=
resumecheckconsistency controller=id vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

Example Syntax

To resume a check consistency on virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=
resumecheckconsistency controller=1 vdisk=4
```

omconfig Blink Virtual Disk

Use the following **omconfig** command syntax to blink the physical disks included in a virtual disk.

Complete Syntax

```
omconfig storage vdisk action=blink controller=id
vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the omreport command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

Example Syntax

To blink the physical disks in virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=blink controller=1
vdisk=4
```

omconfig Unblink Virtual Disk

Use the following **omconfig** command syntax to unblink the physical disks included in a virtual disk.

Complete Syntax

```
omconfig storage vdisk action=unblink controller=
id vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

Example Syntax

To blink the physical disks in virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=unblink controller=1
vdisk=4
```

omconfig Initialize Virtual Disk

Use the following **omconfig** command syntax to initialize a virtual disk.

Complete Syntax

```
omconfig storage vdisk action=initialize
controller=id vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

Example Syntax

To initialize virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=initialize
controller=1 vdisk=4
```

omconfig Fast Initialize Virtual Disk

Use the following **omconfig** command syntax to fast initialize a virtual disk.

⚠ **CAUTION: You may receive a warning message if you attempt to delete the system or boot partition. However, this warning message is not generated always. Ensure that you do not delete the system or boot partition or other vital data when using this command.**

Complete Syntax

```
omconfig storage vdisk action=fastinit controller=
id vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

In some circumstances, you may receive a warning message if this command deletes the system or boot partition. You can override this warning by using the **force=yes** parameter. In this case, the syntax is as follows:

```
omconfig storage vdisk action=fastinit controller=
id vdisk=id force=yes
```

Example Syntax

To fast initialize virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=fastinit controller=1
vdisk=4
```

omconfig Slow Initialize Virtualize Disk

Use the following **omconfig** command syntax to slow initialize a virtual disk.

⚠ **CAUTION: You may receive a warning message if you attempt to delete the system or boot partition. However, this warning message is not generated always. Ensure that you do not delete the system or boot partition or other vital data when using this command.**

Complete Syntax

```
omconfig storage vdisk action=slowinit controller=
id vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

In some circumstances, you may receive a warning message if this command deletes the system or boot partition. You can override this warning by using the **force=yes** parameter. In this case, the syntax is as follows:

```
omconfig storage vdisk action=slowinit controller=
id vdisk=id force=yes
```

Example Syntax

To slow initialize virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=slowinit controller=
1 vdisk=4
```

omconfig Cancel Initialize Virtual Disk

Use the following **omconfig** command syntax to cancel the initialization of a virtual disk.

Complete Syntax

```
omconfig storage vdisk action=cancelinitialize
controller=id vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

Example Syntax

To cancel the initialization of virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=cancelinitialize
controller=1 vdisk=4
```

omconfig Cancel Background Initialize

Use the following **omconfig** command syntax to cancel the background initialization process on a virtual disk.

Complete Syntax

```
omconfig storage vdisk action=cancelbginitialize
controller=id vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

Example Syntax

To cancel background initialization on virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=cancelbginitialize
controller=1 vdisk=4
```

omconfig Assign Dedicated Hot Spare

Use the following **omconfig** command syntax to assign one or more physical disks to a virtual disk as a dedicated hot spare.

Complete Syntax

```
omconfig storage vdisk action=
assigndedicatedhotspare controller=id vdisk=id
pdisk=<PDISKID> assign=yes
```

where *id* is the controller ID and virtual disk ID. The **<PDISK>** variable specifies the physical disk.

To obtain the values for the controller, virtual disk, and physical disk, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** and **omreport storage pdisk controller=ID** to display the IDs for the virtual disks and physical disks attached to the controller.

Example Syntax

In this example, you are assigning physical disk 3 on connector 0 of controller 1 as a dedicated hot spare to virtual disk 4. On a Serial Attached SCSI (SAS) controller, the physical disk resides in enclosure 2.

Example for SCSI, SATA, and ATA Controllers

To assign the dedicated hot spare described in this example, type:

```
omconfig storage vdisk action=
assigndedicatedhotspare controller=1 vdisk=4
pdisk=0:3 assign=yes
```

Example for SAS Controllers

To assign the dedicated hot spare described in this example, type:

```
omconfig storage vdisk action=
assigndedicatedhotspare controller=1 vdisk=4
pdisk=0:2:3 assign=yes
```

omconfig Delete Virtual Disk

Use the following **omconfig** command syntax to delete a virtual disk.

⚠ **CAUTION: Deleting a virtual disk destroys all information including file systems and volumes residing on the virtual disk. You may receive a warning message if you attempt to delete the system or boot partition. However, this warning message is not generated always. Ensure that you do not delete the system or boot partition or other vital data when using this command.**

Complete Syntax

```
omconfig storage vdisk action=deletevdisk
controller=id vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

In some circumstances, you may receive a warning message if this command deletes the system or boot partition. You can override this warning by using the **force=yes** parameter. In this case, the syntax is as follows:

```
omconfig storage vdisk action=deletevdisk
controller=id vdisk=id force=yes
```

Example Syntax

To delete virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=deletevdisk
controller=1 vdisk=4
```

omconfig Format Virtual Disk

Use the following **omconfig** command syntax to format a virtual disk.

Complete Syntax

```
omconfig storage vdisk action=format controller=id
vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

Example Syntax

To format virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=format controller=1
vdisk=4
```

omconfig Reconfiguring Virtual Disks

You can reconfigure a virtual disk to change the virtual disk's RAID level or increase its size by either adding physical disks or using the available free space. On some controllers, you can also remove physical disks.

Complete Syntax

```
omconfig storage vdisk action=reconfigure
controller=id vdisk=id raid=<c| r0| r1| r1c| r5|
r6| r10> pdisk=<PDISK> [size=<size>
vdcapacityexpansion=yes sizeinpercent=<1 to 100>]
```

Example Syntax to reconfigure

To reconfigure virtual disk 4 to a size of 800 MB, use RAID-5 and physical disks 0 through 3 on connector 0 of controller 1. On a SAS controller, the physical disks reside in enclosure 2.

Example for SCSI, SATA, and ATA Controllers

In this example, type:

```
omconfig storage vdisk action=reconfigure
controller=1 vdisk=4 raid=r5 size=800m pdisk=
0:0,0:1,0:2,0:3
```

Example for SAS Controllers

In this example, type:

```
omconfig storage vdisk action=reconfigure
controller=1 vdisk=4 raid=r5 pdisk=
0:2:0,0:2:1,0:2:2,0:2:3
```

Example Syntax to resize

To increase the size of the virtual disk by 20 percent using the available free space, use RAID-5 and physical disks 0 through 3 on connector 0 of controller 1. On a SAS controller, the physical disks reside in enclosure 2.

In this example, type:

```
omconfig storage vdisk action=reconfigure
controller=1 vdisk=4 raid=r5 pdisk=
0:2:0,0:2:1,0:2:2,0:2:3 vdcapacityexpansion=yes
sizeinpercent=20
```

NOTE: vdcapacityexpansion parameter is supported only on PERC H700 and PERC H800 controllers. If you set **vdcapacityexpansion=yes**, you should specify **sizeinpercent**. If you do not set **vdcapacityexpansion**, you should specify **size**.

omconfig Secure Virtual Disk

Use the following **omconfig** command syntax to encrypt a virtual disk.

Complete Syntax

```
omconfig storage vdisk action=securevd controller=
id vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

Example Syntax

To encrypt virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=securevd controller=
1 vdisk=4
```

omconfig Clear Virtual Disk Bad Blocks

Use the following **omconfig** command syntax to clear virtual disk bad blocks.

Complete Syntax

```
omconfig storage vdisk action=clearvdbadblocks
controller=id vdisk=id
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain the values for controller ID and virtual disk ID, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

Example Syntax

For example, to clear bad blocks on virtual disk 4 on controller 1, type:

```
omconfig storage vdisk action=clearvdbadblocks
controller=1 vdisk=4
```

omconfig Change Virtual Disk Policy

Use the following **omconfig** command syntax to change a virtual disk's read, write, or cache policy.

Complete Syntax

```
omconfig storage vdisk action=changepolicy
controller=id vdisk=id [diskcachepolicy=
<enabled|disabled> | readpolicy=<ra| nra| ara|
rc|nrc> | writepolicy=<wb| wt| wc| nwc> | fwb>
cachepolicy=<d | c>]
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

See the *Dell OpenManage Online Help* for more information about the controller-specific diskcache, read, write, and cache policy. For information on specifying these parameters using the **omconfig** command, see the following:

- **[readpolicy=<ra| nra| ara| rc| nrc>]** Parameter (Optional)
- **[writepolicy=<wb| wt| wc| nwc | fwb>]** Parameter (Optional)
- **[cachepolicy=<d | c>]** Parameter (Optional)
- **[diskcachepolicy=<enabled|disabled>]** Parameter (Optional)

Example Syntax

To change the read policy of virtual disk 4 on controller 1 to no-read-ahead, type:

```
omconfig storage vdisk action=changepolicy
controller=1 vdisk=4 readpolicy=nra
```

omconfig Replace Member Virtual Disk

Use the following **omconfig** command syntax to replace the member of a given virtual disk with the destination disk.

Complete Syntax

```
omconfig storage vdisk action=replacememberdisk
controller=id vdisk=id source=<PDISKID>
destination=<PDISKID>
```

where *id* is the controller ID and virtual disk ID. The **<PDISK>** variable specifies the physical disk.

To obtain the values for the controller, virtual disk, and physical disk, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** and **omreport storage pdisk controller=ID** to display the IDs for the virtual disks and physical disks attached to the controller.

Example Syntax

In this example, you are replacing physical disk 3 on connector 0 of controller 1 of virtual disk 4 with physical disk 5. On a Serial Attached SCSI (SAS) controller, the physical disk resides in enclosure 2.

Example for SCSI, SATA, and ATA Controllers

To replace the member disk described in this example, type:

```
omconfig storage vdisk action=replacememberdisk
controller=1 vdisk=4 source=0:3 destination=0:5
```

Example for SAS Controllers

To replace the member disk described in this example, type:

```
omconfig storage vdisk action=replacememberdisk
controller=1 vdisk=4 source=0:2:3 destination=
0:2:5
```

omconfig Rename Virtual Disk

Use the following **omconfig** command syntax to rename a virtual disk.

Complete Syntax

```
omconfig storage vdisk action=rename controller=id
vdisk=id name=<string>
```

where *id* is the controller ID and virtual disk ID as reported by the **omreport** command and <string> is the new name for the virtual disk. To obtain the values for controller ID and virtual disk ID, type **omreport storage controller** to display the controller IDs and then type **omreport storage vdisk controller=ID** to display the IDs for the virtual disks attached to the controller.

Example Syntax

To rename virtual disk 4 on controller 1 to vd4, type:

```
omconfig storage vdisk action=rename controller=1
vdisk=4 name=vd4
```

omconfig Controller Commands

The following sections provide the **omconfig** command syntax required to execute controller tasks.

⚠ **CAUTION: The *omconfig storage controller action=resetconfig controller=id* resets the controller configuration. Resetting the controller configuration permanently destroys all data on all virtual disks attached to the controller. System or boot partition residing on these virtual disks is destroyed.**

📝 **NOTE:** The DKM feature will be available from first half of calendar year 2011.

Table 8-4. omconfig Controller Commands

Required Command Levels (1, 2, 3)	Optional name=value pairs
omconfig storage controller	

action=rescan controller=id

action=enablealarm controller=id

action=disablealarm controller=id

action=quietalarm controller=id

action=testalarm controller=id

action=resetconfig controller=id [force=yes]

action=createvdisk controller=id raid=<c| r0| r1| r1c| r5|r6| r10| r50|r60> size=<number | b | m |g |max | min> pdisk= <PDISKID> [stripesize=< 2kb| 4kb| 8kb| 16kb| 32kb| 64kb| 128kb | 256kb | 512kb | 1mb >] [cachepolicy=<d | c>] [readpolicy=<ra| nra| ara| rc| nrc>] [writepolicy=<wb | wt | wc | nwc | fwb>] [diskcachepolicy=<disabled | enabled>] [name=<string>] [spanlength=<n>] | [secureflag=yes]

NOTE: For RAID 10 on SAS controllers with firmware version 6.1 and later, **spanlength** is an optional parameter (default=2).

action=setrebuildrate controller=id rate=<0 to 100>

action=setchangecontrollerproperties controller=<id> [bgirate=<rate>][reconstructrate= <rate>][checkconsistencyrate=<rate>][rebuildrate= <rate>][clearredundantpath= clear][abortcheckconsistencyonerror= <enabled/disabled>][loadbalance= <auto/disabled>][allowrevertibilehotspareandreplacemember= enabled/disabled] [autoreplacememberonpredictivefailure= <enabled/disabled>][persistenthotspare= enabled/disabled]rate=<0 to 100>

action=discardpreservedcache controller=id forcepreservedcachediscard=<enabled/disabled>

action=createsecuritykey controller=id keyid=<keyid> passphrase=<passphrase string> [escrow=yes] [filepath= <Absolute path to the escrow file>]

NOTE: If you set **escrow=yes**, you should specify the escrow file path.

Table 8-4.   omconfig Controller Commands *(continued)*

Required Command Levels (1, 2, 3)	Optional name=value pairs
	action=changesecuritykey controller=id keyid=<keyid> passphrase=<passphrase string> oldpassphrase= <oldpassphrase string> [escrow=yes] [filepath=<Absolute path to the escrow file>] **NOTE:** If you set **escrow=yes**, you should specify the escrow file path. action=deletesecuritykey controller=id action=setbgirate controller=id rate=<0 to 100 > action=setreconstructrate controller=id rate=<0 to 100> action=setcheckconsistencyrate controller=id rate=<0 to 100> action=exportlog controller=id action=importsecureforeignconfig controller=id passphrase= <passphrase for foreign configuration to be imported> action=unlockdkmforeignconfig controller=id **NOTE:** The DKM feature will be available from first half of calendar year 2011. action=importforeignconfig controller=id action=importrecoverforeignconfig controller=id action=clearforeignconfig controller=id action=setpdiskpwrmanagement controller=id spindownunconfigureddrives=<enabled/disabled> spindownhotspares=<enabled/disabled> spindowntimeinterval=<30 to 1440><minutes> action=setpatrolreadmode controller=id mode=<manual | auto | disable> action=startpatrolread controller=id action=stoppatrolread controller=id action=createcachecade controller=id pdisk=<PDISKID> [name=<string>]

Table 8-4.   omconfig Controller Commands *(continued)*

Required Command Levels (1, 2, 3)	Optional name=value pairs
	action=enablelkm controller=id keyid=<keyid> passphrase= <passphrase string> [escrow=yes] [filepath=<Absolute path to the escrow file>]
	NOTE: If you set **escrow=yes**, you should specify the escrow file path.
	action=switchtolkm controller=id keyid=<keyid> passphrase= <passphrase string> [escrow=yes] [filepath=<Absolute path to the escrow file>]
	NOTE: If you set **escrow=yes**, you should specify the escrow file path.
	action=rekeylkm controller=id
	action=switchtodkm controller=id keyid=<keyid> lkmpassphrase=<LKM passphrase string>
	NOTE: The DKM feature will be available from first half of calendar year 2011.
	action=enabledkm controller=id
	action=rekeydkm controller=id
	action=unlockdkmforeignconfig controller=id

omconfig Rescan Controller

Use the following **omconfig** command syntax to rescan a controller. See Dell OpenManage Online Help for more information about Rescan Controller.

Complete Syntax

```
omconfig storage controller action=rescan
controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To rescan controller 1, type:

```
omconfig storage controller action=rescan
controller=1
```

📝 **NOTE:** The rescan controller is not supported on non–RAID SCSI and SAS controllers. Reboot the system for the configuration changes on non-RAID SCSI controllers to be visible.

omconfig Enable Controller Alarm

Use the following **omconfig** command syntax to enable the controller alarm. See the *Dell OpenManage Online Help* for more information about Enable Controller Alarm.

Complete Syntax

```
omconfig storage controller action=enablealarm
controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To enable the alarm on controller 1, type:

```
omconfig storage controller action=enablealarm
controller=1
```

omconfig Disable Controller Alarm

Use the following **omconfig** command syntax to disable the controller alarm. See the *Dell OpenManage Online Help* for more information about Disable Controller Alarm.

Complete Syntax

```
omconfig storage controller action=disablealarm
controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To disable the alarm on controller 1, type:

```
omconfig storage controller action=disablealarm
controller=1
```

omconfig Quiet Controller Alarm

Use the following **omconfig** command syntax to silence an activated controller alarm. See the *Dell OpenManage Online Help* for more information about Quite Controller Alarm.

Complete Syntax

```
omconfig storage controller action=quietalarm
controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To quiet the alarm on controller 1, type:

```
omconfig storage controller action=quietalarm
controller=1
```

omconfig Test Controller Alarm

Use the following **omconfig** command syntax to test the functionality of the controller alarm. The alarm sounds for about two seconds. See the *Dell OpenManage Online Help* for more information about Test Controller Alarm.

Complete Syntax

```
omconfig storage controller action=testalarm
controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To test the alarm on controller 1, type:

```
omconfig storage controller action=testalarm
controller=1
```

omconfig Reset Controller Configuration

Use the following **omconfig** command syntax to reset the controller configuration.

⚠ **CAUTION: Resetting a configuration permanently destroys all data on all virtual disks attached to the controller. System or boot partition residing on these virtual disks isS destroyed. You may receive a warning message if this command results in deleting the system or boot partition. However, this warning message is not generated always. Ensure that you do not delete the system or boot partition or other vital data when using this command.**

Complete Syntax

```
omconfig storage controller action=resetconfig
controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

In some circumstances, you may receive a warning message if this command deletes the system or boot partition. You can override this warning by using the **force=yes** parameter. In this case, the syntax is as follows:

```
omconfig storage controller action=resetconfig
controller=id force=yes
```

Example Syntax

To reset the configuration on controller 1, type:

```
omconfig storage controller action=resetconfig
controller=1
```

omconfig Create Virtual Disk

The *Dell OpenManage Online Help* provides additional information about creating virtual disks.

The **omconfig** syntax for creating a virtual disk has several parameters. You must specify the following parameters:

- Controller (controller=id)
- RAID level (raid=<c| r0| r1| r1c| r5|r6| r10| r50|r60>)
- Size (size=<number | max | min>)

Physical disk is specified as either:

For SCSI, SATA, and ATA Controllers
pdisk=connector:enclosureID:targetID

where *connector:enclosureID:targetID* is the connector number, enclosure number, and slot number.
For example *pdisk=0:1:2*

For SAS Controllers
pdisk=connector:targetID

where *connectorID:targetID* is the connector number and the slot number.
For example: pdisk=0:2

Storage Management supplies default values for any of the other parameters that you do not specify.

For creating an encrypted virtual disk, specify **secureflag=yes**. Encrypted virtual disks can be created only with SED drives.

Complete Syntax

```
omconfig storage controller action=createvdisk
controller=id raid=<c| r0| r1| r1c| r5| r6| r10| r50
|r60> size=<number | max | min> pdisk=<PDISKID>
[stripesize=< 2kb| 4kb| 8kb| 16kb| 32kb| 64kb|
128kb>] [cachepolicy=<d | c>] [diskcachepolicy=
<disabled | enabled>][readpolicy=<ra | nra | ara |
rc| nrc>] [writepolicy=<wb| wt| wc| nwc | fwb>]
[name=<string>] [spanlength=<n>] | [secureflag=yes]
```

NOTE: If you are configuring RAID for SAS controllers with firmware version 6.1 and later, **spanlength** is an optional parameter (default=2). **Spanlength** should be an even number and should be lesser than or equal to half the number of physical disks specified in **size**.

Parameter Specification for Create and Reconfigure Virtual Disk

The following sections indicate how to specify the **omconfig storage controller action=createvdisk** parameters.

controller=id Parameter (Required)

raid=<c| r0| r1| r1c| r5| r6| r10| r50| r60> Parameter (Required)

size=<number | max | min> Parameter (Required)

pdisk=<connector:targetID,connector:targetID,.....> Parameter (Required)

[stripesize=< 2kb| 4kb| 8kb| 16kb| 32kb| 64kb| 128kb>] Parameter (Optional)

[cachepolicy=<d | c>] Parameter (Optional)

[readpolicy=<ra| nra| ara| rc| nrc>] Parameter (Optional)

[writepolicy=<wb| wt| wc| nwc | fwb>] Parameter (Optional)

[name=<string>] Parameter (Optional)

[spanlength=<n>] Parameter (Optional)

controller=id Parameter (Required)

Specify the controller ID as reported by the **omreport storage controller** command. For example:

```
controller=2
```

raid=<c| r0| r1| r1c| r5| r6| r10| r50| r60> Parameter (Required)

Use the **raid=<c| r0| r1| r1c| r5| r6 | r10| r50| r60>** parameter to specify concatenation or a RAID level for a virtual disk. Different controllers support different RAID levels. See the *Dell OpenManage Online Help* for more information about RAID levels a controller supports and for general information about RAID levels and concatenation. Table 8-5 indicates how to specify the raid=n parameter for each RAID level and concatenation.

Table 8-5. Raid Level and Concatenation

RAID Level or Concatenation	raid=n Parameter Specification
RAID-0	raid=r0
RAID-1	raid=r1
RAID-5	raid=r5
RAID-6	raid=r6
RAID-10	raid=r10
RAID-50	raid=r50
RAID-60	raid=r60
RAID-1-concatenated	raid=r1c
Concatenation	raid=c

size=<number | max | min> Parameter (Required)

Table 8-6 indicates how to specify the **size=<number | max | min>** parameter.

Table 8-6.   Size Parameter

size=<number | max | min> Parameter Specification	Description
size=<n>	Use this specification to indicate a specific size for the virtual disk. The virtual disk size may be specified in b (bytes), m (megabytes), or g (gigabytes). For example, **size=500m** indicates that the virtual disk should be 500 MB.
size=max	To create a virtual disk that is the maximum size possible, specify **size=max**. When creating a RAID-50 virtual disk, this parameter must be specified as **size=max**.
size=min	To create a virtual disk that is the minimum size possible, specify **size=min**.

PDISKID=<connector:enclosureID:targetID | connector:targetID>

Use this parameter to specify the physical disks to included in the virtual disk.

When reconfiguring a virtual disk, you must specify all physical disks to be included in the reconfigured virtual disk. The physical disk specification applies to physical disks in the original virtual disk and continues to be in the reconfigured virtual disk and to any new physical disks being added to the reconfigured virtual disk. Some controllers allow you to remove a physical disk from a virtual disk. In this case, do not specify the physical disk to be removed.

The **pdisk=<PDISKID>** parameter indicates a physical disk by specifying either **connector:enclosureID:targetID or connector:targetID**.

```
stripesize=< 2kb| 4kb| 8kb| 16kb| 32kb| 64kb|
128kb>] Parameter (Optional)
```

Different controllers support different stripe sizes. See the *Dell OpenManage Online Help* for more information on stripe sizes supported for a controller. All stripe sizes are specified in kilobytes. For example, when specifying 128 KB as the stripe size, type:

```
stripesize=128kb
```

[cachepolicy=<d | c>] Parameter (Optional)

Different controllers support different cache policies. Table 8-7 indicates how to specify the [**cachepolicy=<d | c>**] parameter for each of the cache policies.

Table 8-7.   Cache Policy Parameters

Cache Policy	cachepolicy=d	c Parameter Specification
Direct I/O	cachepolicy=d
Cache I/O	cachepolicy=c

[diskcachepolicy=<disabled | enabled>] Parameter (Optional)

Different controllers support different disk cache policies. The following table indicates how to specify the [**diskcachepolicy=<disabled | enabled>**] parameter for each of the cache policies.

Disk Cache Policy	diskcachepolicy=disabled	enabled Parameter Specification
Disabled	diskcachepolicy=disabled
Enabled	diskcachepolicy=enabled

[readpolicy=<ra| nra| ara| rc| nrc>] Parameter (Optional)

Different controllers support different read policies. Table 8-8 indicates how to specify the [**readpolicy=<ra| nra| ara| rc| nrc>**] parameter for each of the read policies.

Table 8-8.   Read Policy Paramaters

Read Policy	readpolicy=ra	ara	nra	rc	nrc Parameter Specification
Read ahead	readpolicy=ra
Adaptive read ahead	readpolicy=ara
No read ahead	readpolicy=nra
Read cache	readpolicy=rc
No read cache	readpolicy=nrc

[writepolicy=<wb| wt| wc| nwc>] Parameter (Optional)

Different controllers support different write policies. Table 8-9 indicates how to specify the [**writepolicy=<wb| wt| wc| nwc | fwb>**] parameter for each of the write policies.

Table 8-9.   Write Policy Parameters

Write Policy	writepolicy=wb	wt	wc	fwb	nwc Parameter Specification
Write–back cache	writepolicy=wb
Write–through cache	writepolicy=wt
Write cache	writepolicy=wc
Force write back	writepolicy=fwb
No write cache	writepolicy=nwc

[name=<string>] Parameter (Optional)

Use this parameter to specify a name for the virtual disk. For example:

```
name=VirtualDisk1
```

[spanlength=<n>] Parameter (Required for RAID 50 and RAID 60 and optional for RAID 10)

Use this parameter to specify the number of physical disks to be included in each stripe. This parameter only applies to RAID-50 virtual disks. If you are not creating a RAID-50 virtual disk, do not specify this parameter. For example:

```
spanlength=3
```

For RAID 10 on SAS controllers with firmware version 6.1 and later, `spanlength` is optional. Also, you can now specify the `spanlength` as an even number with a maximum of 8 spans with 32 physical disks each. For example,

```
omconfig storage controller action=createvdisk
controller=1 raid=r10 size=min pdisk=
1:1:0,1:1:1,1:1:3,1:1:4,1:1:6,1:1:7,1:1:8,1:1:9
spanlength=4
```

Example Syntax

For example, you may want to create a RAID-5 virtual disk on a PERC 3/QC controller. See the *Dell OpenManage Online Help* for information on read, write, and cache policies are supported by this controller. For example, to create a virtual disk with the following read, write, and cache policy:

- Read-ahead
- Write–through caching
- Cache I/O

The virtual disk is 500 MB with a stripe size of 16 KB. The name of the virtual disk is **vd1** and it resides on connector 0 of controller 1. Because the virtual disk is a RAID-5, it requires at least three physical disks. In this example, you specify four physical disks. These are physical disks 0 through 3.

To create the virtual disk described in this example, type:

```
omconfig storage controller action=createvdisk
controller=1 raid=r5 size=500m pdisk=
0:0,0:1,0:2,0:3 stripesize=16kb cachepolicy=c
readpolicy=ra writepolicy=wt
```

The only parameters that require specification are for the controller, RAID level, virtual disk size, and physical disk selection. Storage Management supplies default values for all other unspecified parameters.

omconfig Set Controller Rebuild Rate

Use the following **omconfig** command syntax to set the controller rebuild rate:

Complete Syntax

```
omconfig storage controller action=setrebuildrate
controller=id rate=<0 to 100>
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To set the rebuild rate to 50 on controller 1, type:

```
omconfig storage controller action=setrebuildrate
controller=1 rate=50
```

omconfig Change Controller Properties

Use the following **omconfig** command to change any or all of the following controller properties.

Complete Syntax

```
omconfig storage controller action=
setchangecontrollerproperties controller=<id>
bgirate=<rate> reconstructrate=<rate>
checkconsistencyrate=<rate> rebuildrate=<rate>
clearredundantpath=clear
abortcheckconsistencyonerror=<enabled/disabled>
loadbalance=<auto/disabled>
allowrevertiblehotspareandreplacemember=
<enabled/disabled>
autoreplacememberonpredictivefailure=
<enabled/disabled> persistenthotspare=
<enabled/disabled>
```

Example Syntax

To enable allow revertible hot spare and replace member operation, type:

```
omconfig storage controller action=
setchangecontrollerproperties allowrevertiblehotspare
andreplacemember=enabled controller=1
```

omconfig Discard Preserved Cache

Use the following **omconfig storage** command syntax to discard the preserved cache on the controller.

Complete Syntax

```
omconfig storage controller action=
discardpreservedcache controller=id force=
enabled/disabled
```

If you set `force=enabled`, the cache is discarded irrespective of whether the controller detects a foreign or an offline virtual disk.

Example Syntax

To discard the preserved cache, type:

```
omconfig storage controller action=
discardpreservedcache controller=1 force=enabled
```

⚠ **CAUTION: Discarding the preserved cache can result in data loss. Dell recommends that you run this command using the *force=disabled* option.**

omconfig Create Encryption Key

Use the following **omconfig storage** command syntax to create the encryption key for the controller.

Complete Syntax

```
omconfig storage controller action=
createsecuritykey controller=id keyid=<keyid
string> passphrase=<passphrase string> [escrow=
yes] [filepath=<Absolute path to the escrow file>]
```

Example Syntax

To create the encryption key for the controller, type:

```
omconfig storage controller action=
createsecuritykey controller=1 keyid=Dell_123
passphrase=Dell_123 escrow= yes filepath=
C:/escrow.xml
```

✎ **NOTE:** If you set **escrow=yes**, you should specify the escrow file path.

omconfig Change Encryption Key

Use the following **omconfig storage** command syntax to change the encryption key for the controller, if passphrase is provided.

Complete Syntax

```
omconfig storage controller action=
changesecuritykey controller=id keyid=<keyid
string> passphrase=<passphrase string>
oldpassphrase=<old passphrase string>[escrow=yes]
[filepath=<Absolute path to the escrow file>]
```

Example Syntax

To change the encryption key for the controller, type:

```
omconfig storage controller action=
changesecuritykey controller=1 keyid=Dell_123
passphrase=Dell_123 oldpassphrase=Dell_321 escrow=
yes filepath=C:/escrow.xml
```

NOTE: If you set **escrow=yes**, you should specify the escrow file path.

omconfig Delete Encryption Key

Use the following **omconfig** command syntax to delete the encryption key for the controller.

Complete Syntax

```
omconfig storage controller action=
deletesecuritykey controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To delete the security key on controller 1, type:

```
omconfig storage controller action=
deletesecuritykey controller=1
```

omconfig Set Background Initialization Rate

Use the following **omconfig** command syntax to set the background initialization rate.

Complete Syntax

```
omconfig storage controller action=setbgirate
controller=id rate=<0 to 100>
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To set the background initialization rate to 50 on controller 1, type:

```
omconfig storage controller action=setbgirate
controller=1 rate=50
```

omconfig Set Reconstruct Rate

Use the following **omconfig** command syntax to set the reconstruct rate.

Complete Syntax

```
omconfig storage controller action=
setreconstructrate controller=id rate=<0 to 100>
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To set the reconstruct rate to 50 on controller 1, type:

```
omconfig storage controller action=
setreconstructrate controller=1 rate=50
```

omconfig Set Check Consistency Rate

Use the following **omconfig** command syntax to set the check consistency rate.

Complete Syntax

```
omconfig storage controller action=
setcheckconsistencyrate controller=id rate=<0 to
100>
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To set the check consistency rate to 50 on controller 1, type:

```
omconfig storage controller action=
setcheckconsistencyrate controller=1 rate=50
```

omconfig Export the Controller Log

Use the following **omconfig** command syntax to export the controller log to a text file. See the *Dell OpenManage Online Help* for more information about the exported log file.

Complete Syntax

```
omconfig storage controller action=exportlog
controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To export the log on controller 1, type:

```
omconfig storage controller action=exportlog
controller=1
```

By default, the log file is exported to **C:\WINNT** or **C:\Windows** on Microsoft Windows systems (based on the Windows version used) and **/var/log** on all Linux systems.

Depending on the controller, the log file name is **afa_<*mmdd*>.log** or **lsi_<*mmdd*>.log** where <*mmdd*> is the month and date. See the *Dell OpenManage Online Help* for more information on the controller log file.

✍ **NOTE:** The export log file command is not supported on the 4/IM, CERC ATA, and 100/4ch controllers.

omconfig Import Secure Foreign Configuration

Use the following **omconfig** command syntax to unlock the encrypted Local Key Management (LKM) foreign configuration drives.

Complete Syntax

```
omconfig storage controller action=
importsecureforeignconfig controller=id
passphrase=<passphrase string for the foreign
configuration>
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To unlock the ecncrypted LKM configuration drives on controller 1, type:

```
omconfig storage controller action=
importsecureforeignconfig controller=1 passphrase=
Dell_123
```

omconfig Unlock DKM Foreign Configuration

Use the following **omconfig** command syntax to unlock the encrypted DKM Foreign configuration drives.

✍ **NOTE:** The DKM feature will be available from first half of calendar year 2011

Complete Syntax

```
omconfig storage controller action=
unlockdkmforeignconfig controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To unlock the encrypted DKM configuration drives on controller 1, type:

```
omconfig storage controller action=
unlockdkmforeignconfig controller=1
```

omconfig Import Foreign Configuration

Use the following **omconfig** command syntax to import all virtual disks that reside on physical disks newly attached to the controller.

Complete Syntax

```
omconfig storage controller action=
importforeignconfig controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

📝 **NOTE:** This command is supported only in firmware version 5.0.*x*.

Example Syntax

To import foreign configurations on controller 1, type:

```
omconfig storage controller action=
importforeignconfig controller=1
```

omconfig Import/Recover Foreign Configuration

Use the following **omconfig** command syntax to import and recover all virtual disks that reside on physical disks newly attached to the controller.

Complete Syntax

```
omconfig storage controller action=
importrecoverforeignconfig controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

> **NOTE:** This command is supported only in firmware version 5.1.1.

Example Syntax

To import and recover foreign configurations on controller 1, type:

```
omconfig storage controller action=
importrecoverforeignconfig controller=1
```

omconfig Clear Foreign Configuration

Use the following **omconfig** command syntax to clear or delete all virtual disks that reside on physical disks newly attached to the controller.

Complete Syntax

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

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To clear foreign configurations on controller 1, type:

```
omconfig storage controller action=
clearforeignconfig controller=1
```

omconfig Physical Disk Power Management

Use the following **omconfig** command syntax for managing the power of physical disks in a controller by spinning down hot spares and drives that are not configured.

Complete Syntax

```
omconfig storage controller action=
setpdiskpwrmanagement spindownunconfigureddrives=
<enabled/disabled> spindownhotspares=
<enabled/disabled> spindowntimeinterval=<30 to
1440 minutes> controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To spin down drives that are not configured or hot spares that are unattended for 30 minutes, type:

```
omconfig storage controller action=
setpdiskpwrmanagement spindownunconfigureddrives=
enabled spindownhotspares=enabled
spindowntimeinterval=30 controller=1
```

omconfig Set Patrol Read Mode

Use the following **omconfig** command syntax to set the patrol read mode for the controller.

Complete Syntax

```
omconfig storage controller action=
setpatrolreadmode controller=id mode=
manual|auto|disable
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To set the patrol read on controller 1 to manual mode, type:

```
omconfig storage controller action=
setpatrolreadmode controller=1 mode=manual
```

omconfig Start Patrol Read

Use the following **omconfig** command syntax to start the patrol read task on the controller.

Complete Syntax

```
omconfig storage controller action=startpatrolread
controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To start the patrol read task on controller 1, type:

```
omconfig storage controller action=startpatrolread
controller=1
```

NOTE: To be able to start patrol read, the current patrol read mode should be set to Manual.

omconfig Stop Patrol Read

Use the following **omconfig** command syntax to stop the patrol read task on the controller.

Complete Syntax

```
omconfig storage controller action=stoppatrolread
controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To stop the patrol read task on controller 1, type:

```
omconfig storage controller action=stoppatrolread
controller=1
```

NOTE: To be able to stop patrol read, the current patrol read mode should be set to Manual.

omconfig Create Cachecade

Use the following **omconfig storage** command syntax to create a cachecade on the given controller.

NOTE: The cachecade feature will be available from first half of calendar year 2011

Complete Syntax

```
omconfig storage controller action=createcachecade
controller=id pdisk=<PDISKID> [name=<string>]
```

where *id* is the controller ID as reported by the **omreport storage controller** command and **PDISKID** is specified as:

```
pdisk=connector:enclosureID:targetID |
connector:targetID
```

Example Syntax

To create a cachecade on the controller 0, type:

```
omconfig storage controller action=createcachecade
controller=0 pdisk=0:2:3 name=Cachecade1
```

omconfig Enable LKM Controller

Use the following **omconfig storage** command syntax to enable the LKM mode and create the encryption key for the controller.

Complete Syntax

```
omconfig storage controller action=enablelkm
controller=id keyid=<keyid string> passphrase=
<passphrase string> [escrow=yes] [filepath=
<Absolute path to the escrow file>]
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To create the encryption key for the controller, type:

```
omconfig storage controller action=enablelkm
controller=1 keyid=Dell_123 passphrase=Dell_123
escrow= yes filepath=C:/escrow.xml
```

NOTE: If you set **escrow=yes**, you should specify the escrow file path.

omconfig Switch to LKM Controller

Use the following **omconfig storage** command syntax to change the encryption key from DKM to LKM mode on the controller.

Complete Syntax

```
omconfig storage controller action=switchtolkm
controller=id keyid=<keyid string> passphrase=
<passphrase string> [escrow=yes] [filepath=
<Absolute path to the escrow file>]
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To change the encryption key for the controller, type:

```
omconfig storage controller action=switchtolkm
controller=1 keyid=Dell_123 passphrase=Dell_123
escrow= yes filepath=C:/escrow.xml
```

📝 **NOTE:** If you set **escrow=yes**, you should specify the escrow file path.

omconfig Rekey LKM Controller

Use the following **omconfig storage** command syntax to re-key the encryption key in LKM mode for the controller.

Complete Syntax

```
omconfig storage controller action=rekeylkm
controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To re-key the encryption key for the controller, type:

```
omconfig storage controller action=rekeylkm
controller=1
```

omconfig Switch to DKM Controller

Use the following **omconfig storage** command syntax to change the encryption key from LKM to DKM mode on the controller.

📝 **NOTE:** The DKM feature will be available from first half of calendar year 2011

Complete Syntax

```
omconfig storage controller action=switchtodkm
controller=id keyid=<keyid string> lkmpassphrase=
<lkm passphrase string>
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To change the encryption key for the controller, type:

```
omconfig storage controller action=switchtodkm
controller=1 keyid=Dell_123 lkmpassphrase=Dell_123
```

omconfig Enable DKM Controller

Use the following **omconfig storage** command syntax to enable the DKM mode and create the encryption key for the controller.

✍ **NOTE:** The DKM feature will be available from first half of calendar year 2011

Complete Syntax

```
omconfig storage controller action=enabledkm
controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To change the encryption key for the controller, type:

```
omconfig storage controller action=enablekdm
controller=1
```

omconfig Rekey DKM Controller

Use the following **omconfig storage** command syntax to re-key the encryption key in DKM mode for the controller.

✍ **NOTE:** The DKM feature will be available from first half of calendar year 2011

Complete Syntax

```
omconfig storage controller action=rekeydkm
controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To re-key the encryption key for the controller, type:

```
omconfig storage controller action=rekeydkm
controller=1
```

omconfig Unlock DKM Foreign Configuration

Use the following **omconfig storage** command syntax to unlock the DKM encrypted foreign configuration drives.

📝 **NOTE:** The DKM feature will be available from first half of calendar year 2011

Complete Syntax

```
omconfig storage controller action=
unlockdkmforeignconfig controller=id
```

where *id* is the controller ID as reported by the **omreport storage controller** command.

Example Syntax

To unlock the DKM encrypted foreign configuration drives, type:

```
omconfig storage controller action=
unlockdkmforeignconfig controller=0
```

omconfig Enclosure Commands

The following sections provide the **omconfig** command syntax required to execute enclosure tasks.

Table 8-10.   omconfig Enclosure Commands

Required Command Levels (1, 2, 3)	Optional name=value pairs
omconfig storage enclosure	
	action=enablealarm controller=id enclosure=<ENCLOSUREID>
	action=disablealarm controller=id enclosure=<ENCLOSUREID>
	action=setassettag controller=id enclosure=<ENCLOSUREID> assettag=<string>
	action=setassetname controller=id enclosure=<ENCLOSUREID> assetname=<string>
	action=settempprobes controller=id enclosure=<ENCLOSUREID> index=id minwarn=n maxwarn=n
	action=resettempprobes controller=id enclosure=<ENCLOSUREID> index=id
	action=setalltempprobes controller=id enclosure=<ENCLOSUREID> minwarn=n maxwarn=n
	action=resetalltempprobes controller=id enclosure=<ENCLOSUREID>
	action=blink controller=id enclosure=<ENCLOSUREID>

omconfig Enable Enclosure Alarm

Use the following **omconfig** command syntax to enable the enclosure alarm:

Complete Syntax

```
omconfig storage enclosure action=enablealarm
controller=id enclosure=<ENCLOSUREID>
```

where *id* is the controller ID. The **<ENCLOSUREID>** variable specifies the enclosure.

Example for SCSI, SATA, and ATA Controllers

To enable the alarm on the enclosure attached to connector 2 on controller 1, type:

```
omconfig storage enclosure action=enablealarm
controller=1 enclosure=2
```

Example for SAS Controllers

To enable the alarm on enclosure 2 attached to connector 1 on controller 1, type:

```
omconfig storage enclosure action=enablealarm
controller=1 enclosure=1:2
```

omconfig Disable Enclosure Alarm

Use the following **omconfig** command syntax to disable the enclosure alarm.

Complete Syntax

```
omconfig storage enclosure action=disablealarm
controller=id enclosure=<ENCLOSUREID>
```

where *id* is the controller ID. The **<ENCLOSUREID>** variable specifies the enclosure.

Example for SCSI, SATA, and ATA Controllers

To disable the alarm on the enclosure attached to connector 2 on controller 1, type:

```
omconfig storage enclosure action=disablealarm
controller=1 enclosure=2
```

Example for SAS Controllers

To disable the alarm on enclosure 2 attached to connector 1 on controller 1, type:

```
omconfig storage enclosure action=disablealarm
controller=1 enclosure=1:2
```

omconfig Set Enclosure Asset Tag

Use the following **omconfig** command syntax to specify the enclosure's asset tag:

Complete Syntax

```
omconfig storage enclosure action=setassettag
controller=id enclosure=<ENCLOSUREID> assettag=
<string>
```

where *id* is the controller ID. The **<ENCLOSUREID>** variable specifies the enclosure.

In this syntax, <string> is a user-specified alphanumeric string.

Example for SCSI, SATA, and ATA Controllers

To specify the asset tag to encl20 on the enclosure attached to connector 2 on controller 1, type:

```
omconfig storage enclosure action=setassettag
controller=1 enclosure=2 assettag=encl20
```

Example for SAS Controllers

To specify the asset tag to encl20 on enclosure 2 attached to connector 1 on controller 1, type:

```
omconfig storage enclosure action=setassettag
controller=1 enclosure=1:2 assettag=encl20
```

omconfig Set Enclosure Asset Name

Use the following **omconfig** command syntax to specify the asset name for an enclosure.

Complete Syntax

```
omconfig storage enclosure action=setassetname
controller=id enclosure=<ENCLOSUREID> assetname=
<string>
```

where *id* is the controller ID. The **<ENCLOSUREID>** variable specifies the enclosure.

In this syntax, <string> is a user-specified alphanumeric string.

Example for SCSI, SATA, and ATA Controllers

To specify the asset name to encl43 for the enclosure attached to connector 2 on controller 1, type:

```
omconfig storage enclosure action=setassetname
controller=1 enclosure=2 assetname=encl43
```

Example for SAS Controllers

To specify the asset name to encl43 for enclosure 2 attached to connector 1 on controller 1, type:

```
omconfig storage enclosure action=setassetname
controller=1 enclosure=1:2 assetname=encl43
```

omconfig Set Temperature Probe Thresholds

Use the following **omconfig** command syntax to set the minimum and maximum warning temperature thresholds for a specified temperature probe.

📝 **NOTE:** This command is not supported on SAS controllers.

Complete Syntax

```
omconfig storage enclosure action=settempprobes
controller=id enclosure=<ENCLOSUREID> index=id
minwarn=n maxwarn=n
```

where *id* is the controller ID and the temperature probe ID. The **<ENCLOSUREID>** variable specifies the enclosure.

In this syntax, *n* is a user-specified value for the temperature in Celsius.

Example Syntax

For example, you may want to specify the minimum and maximum warning thresholds for temperature probe 3 to 10 and 40° Celsius.

Example for SCSI, SATA, and ATA Controllers

In this example, temperature probe 3 resides in the enclosure attached to connector 2 on controller 1. To set the temperature probe thresholds to 10 and 40° Celsius, type:

```
omconfig storage enclosure action=settempprobes
controller=1 enclosure=2 index=3 minwarn=10
maxwarn=40
```

omconfig Reset Temperature Probe Thresholds

Use the following **omconfig** command syntax to reset the minimum and maximum warning temperature thresholds back to their default values.

NOTE: This command is not supported on SAS controllers.

Complete Syntax

```
omconfig storage enclosure action=resettempprobes
controller=id enclosure=<ENCLOSUREID> index=id
```

where *id* is the controller ID and the temperature probe ID. The **<ENCLOSUREID>** variable specifies the enclosure.

Example Syntax

For example, you may want to reset the thresholds for temperature probe 3 to the default values.

Example for SCSI, SATA, and ATA Controllers

In this example, temperature probe 3 resides in the enclosure attached to connector 2 on controller 1. To reset the thresholds for temperature probe 3 to the default values, type:

```
omconfig storage enclosure action=resettempprobes
controller=1 enclosure=2 index=3
```

omconfig Set All Temperature Probe Thresholds

Use the following **omconfig** command syntax to set the minimum and maximum warning temperature thresholds for all temperature probes in the enclosure.

NOTE: This command is not supported on SCSI RAID controllers.

Complete Syntax

```
omconfig storage enclosure action=setalltempprobes
controller=id enclosure=<ENCLOSUREID> minwarn=n
maxwarn=n
```

where *id* is the controller ID. The **<ENCLOSUREID>** variable specifies the enclosure.

Example Syntax

For example, you may want to specify the minimum and maximum warning thresholds for all temperature probes to 10 and 40° Celsius.

Example for SAS Controllers

In this example, the temperature probes reside in enclosure 3 attached to connector 2 on controller 1. To set the thresholds for all temperature probes to 10 and 40° Celsius, type:

```
omconfig storage enclosure action=setalltempprobes
controller=1 enclosure=2:3 minwarn=10 maxwarn=40
```

omconfig Reset All Temperature Probe Thresholds

Use the following **omconfig** command syntax to reset the minimum and maximum warning temperature thresholds back to their default value for all temperature probes in the enclosure.

NOTE: This command is not supported on SCSI RAID controllers.

Complete Syntax

```
omconfig storage enclosure action=
resetalltempprobes controller=id enclosure=
<ENCLOSUREID>
```

where *id* is the controller ID. The **<ENCLOSUREID>** variable specifies the enclosure.

Example Syntax

For example, you may want to reset the thresholds for all temperature probes in enclosure 2 on controller 1.

Example for SAS Controllers

In this example, the temperature probes reside in enclosure 3 attached to connector 2 on controller 1. To reset the thresholds for all temperature probes, type:

```
omconfig storage enclosure action=
resetalltempprobes controller=1 enclosure=2:3
```

omconfig Blink

Use the following omconfig command to blink the light-emitting diodes (LEDs) on the enclosure.

Complete Syntax

```
omconfig storage enclosure action=blink
controller=id enclosure=<ENCLOSUREID>
```

where *id* is the controller ID. The **<ENCLOSUREID>** variable specifies the enclosure.

Example for SCSI, SATA, and ATA Controllers

To blink the LEDs for the enclosure attached to connector 2 on controller 1, type:

```
omconfig storage enclosure action=blink
controller=1 enclosure=2
```

Example for SAS Controllers

To blink the LEDs for enclosure 3 attached to connector 2 on controller 1, type:

```
omconfig storage enclosure action=blink
controller=1 enclosure=2:3
```

omconfig Battery Commands

The following sections provide the **omconfig** command syntax required to execute battery tasks.

Table 8-11.   omconfig Battery Commands

Required Command Levels (1, 2, 3)	Optional name=value pairs
omconfig storage battery	
	action=startlearn controller=id battery=id
	action=delaylearn controller=id battery=id
	days=d hours=h

omconfig Start Battery Learn Cycle

Use the following **omconfig** command to start the battery learn cycle.

Complete Syntax

```
omconfig storage battery action=startlearn
controller=id battery=id
```

where *id* is the controller ID and battery ID as reported by the **omreport** command. To obtain this value, type **omreport storage controller** to display the controller IDs and then type **omreport storage battery controller=ID** to display the ID for the controller battery.

Example Syntax

To start the learn cycle on controller 1, type:

```
omconfig storage battery action=startlearn
controller=1 battery=0
```

omconfig Delay Battery Learn Cycle

Use the following **omconfig** command to delay the battery learn cycle for a specified period of time. The battery learn cycle can be delayed for a maximum of seven days or 168 hours.

Complete Syntax

```
omconfig storage battery action=delaylearn
controller=id battery=id days=d hours=h
```

where *id* is the controller ID and battery ID as reported by the **omreport** command. To obtain this value, type **omreport storage controller** to display the controller IDs and then type **omreport storage battery controller=ID** to display the ID for the controller battery.

Example Syntax

To delay the learn cycle for three days and 12 hours on controller 1, type:

```
omconfig storage battery action=delaylearn
controller=1 battery=0 days=3 hours=12
```

omconfig Global Commands

The following sections provide the **omconfig** command syntax required to execute the global commands. When executed, these commands apply to all controllers. These global commands also correspond to the global tasks provided by the Storage tree view object's **Information/Configuration** subtab.

Table 8-12.   omconfig Global Commands

Required Command Levels (1, 2, 3)	Optional name=value pairs
omconfig storage globalinfo	
	action=enablests
	action=disablests
	action=globalrescan
	action=setprotectionpolicies type=ghs or dhs

omconfig Global Enable Smart Thermal Shutdown

By default, the operating system and server shut down when the PV220S and PV221S enclosures reach a critical temperature of 0 or 50° Celsius. However, if you have implemented connector redundancy on the PV220S and PV221S enclosures you can specify that only the enclosure and not the operating system and server be shut down when the enclosure reaches a critical

temperature of 0 or 50° Celsius. Specifying that only the enclosure be shut down during excessive temperatures is known as Smart Thermal Shutdown. See the *Dell OpenManage Online Help* for more information about Smart Thermal Shutdown.

Use the following **omconfig** command syntax to enable smart thermal shutdown.

Complete Syntax

```
omconfig storage globalinfo action=enablests
```

Example Syntax

The **omconfig** command syntax for enabling thermal shutdown does not require that you specify a controller or enclosure ID. To enable thermal shutdown, type the following:

```
omconfig storage globalinfo action=enablests
```

NOTE: You can use the **omreport storage globalinfo** command to determine whether smart thermal shutdown is currently enabled or disabled. The status of smart thermal shutdown is also displayed by the Server Administrator graphical user interface (GUI). To locate this status, select the **Storage** object and the **Information/Configuration** tab.

omconfig Global Disable Smart Thermal Shutdown

If you have previously enabled smart thermal shutdown using the **omconfig** command, you can disable smart thermal shutdown and return the system to its default setting. When smart thermal shutdown is disabled, the operating system and the server shuts down when the PV220S and PV221S enclosures reach a critical temperature of 0 or 50° Celsius.

Use the following **omconfig** command syntax to disable smart thermal shutdown for all controllers.

Complete Syntax

```
omconfig storage globalinfo action=disablests
```

Example Syntax

The **omconfig** command syntax for disabling thermal shutdown does not require that you specify a controller or enclosure ID. To disable thermal shutdown, type the following:

```
omconfig storage globalinfo action=disablests
```

NOTE: You can use the **omreport storage globalinfo** command to determine whether smart thermal shutdown is currently enabled or disabled. The status of smart thermal shutdown is also displayed in the GUI of Server Administrator. To locate this status, select the **Storage** object and the **Information/Configuration** tab.

omconfig Global Rescan Controller

Use the following **omconfig** command syntax to rescan all controllers on the system. See the *Dell OpenManage Online Help* for more information about Global Rescan Controller.

Complete Syntax

```
omconfig storage globalinfo action=globalrescan
```

Example Syntax

The **omconfig** command syntax for rescanning all controllers on the system does not require that you specify a controller ID. To do a global rescan of all controllers, type the following:

```
omconfig storage globalinfo action=globalrescan
```

NOTE: Global rescan is not supported on non-RAID SCSI and SAS controllers. Reboot the system for the configuration changes on non-RAID SCSI controllers to be visible.

omconfig Set Hot Spare Protection Policy

Use the following **omconfig** command syntax to set the Hot Spare Protection Policy for dedicated or global hot spares. See the *Dell OpenManage Server Administrator Storage Management User's Guide* for more information on setting hot spare protection policy.

Complete Syntax

For dedicated hot spare protection policy, type:

```
omconfig storage globalinfo action=
setprotectionpolicies type=dhs raid=<r1 | r5 | r6
| r10 | r50 | r60 | all> hscount=<1-16> warnlevel=
<0-3>
```

where `hscount` is the number of hot spares to be assigned to the virtual disk

and `warnlevel` is the severity level you want to assign to the generated alert, if this policy is violated. Use `hscount=0 warnlevel=0` to reset the dedicated hot spare protection policy for the RAID level.

For global hot spare protection policy, type:

```
omconfig storage globalinfo action=
setprotectionpolicies type=ghs hscount=<1-16>
warnlevel=<0-3> includeghsinvdstate=<yes | no>
```

where `hscount` is the number of hot spares to be assigned to the virtual disk

and `warnlevel` is the severity level you want to assign to the generated alert, if this policy is violated. Use `hscount=0 warnlevel=0` to reset the global hot spare protection policy for the RAID level.

omconfig Connector Commands

The following sections provide the **omconfig** command syntax required to execute connector tasks.

Table 8-13.   omconfig Connector Commands

Required Command Levels (1, 2, 3)	Optional name=value pairs
omconfig storage connector	
	action=rescan controller=id connector=id

omconfig Rescan Connector

Use the following **omconfig** command to rescan a controller connector. This command rescans all connectors on the controller and is therefore similar to performing a controller rescan.

NOTE: This command is not supported on SAS controllers.

Complete Syntax

```
omconfig storage connector action=rescan
controller=id connector=id
```

where *id* is the controller ID and the connector ID as reported by the
omreport command. To obtain these values, type **omreport storage controller**
to display the controller IDs and then type **omreport storage connector**
controller=ID to display the IDs for the connectors attached to the
controller.

Example Syntax

To rescan connector 2 on controller 1, type:

```
omconfig storage connector action=rescan
controller=1 connector=2
```

omconfig Cachecade Commands

The following sections provide the **omconfig** command syntax required to
execute cachecade tasks.

📝 **NOTE:** The cachecade feature will be available from first half of calendar year
2011.

Table 8-14.   omconfig Cachecade Commands

Required Command Levels (1, 2, 3)	Optional name=value pairs
omconfig storage cachecade	
	action=blink controller=id cachecade=id
	action=unblink controller=id cachecade=id
	action=deletecachecade controller=id cachecade=id [force=yes]
	action=resize controller=id cachecade=id pdisk=<PDISKID>
	action=rename controller=id cachecade=id name=<string>

omconfig Blink Cachecade

Use the following **omconfig** command syntax to blink the physical disks
included in a cachecade.

Complete Syntax

```
omconfig storage cachecade action=blink
controller=id cachecade=id
```

where *id* is the controller ID and cachecade ID as reported by the omreport command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage cachecade controller=ID** to display the IDs for the cachecades of the controller.

Example Syntax

To blink the physical disk in cachecade 4 on controller 1, type:

```
omconfig storage cachecade action=blink
controller=1 cachecade=4
```

omconfig Unblink Cachecade

Use the following **omconfig** command syntax to unblink the physical disks included in a cachecade.

Complete Syntax

```
omconfig storage cachecade action=unblink
controller=id cachecade=id
```

where *id* is the controller ID and cachecade ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage cachecade controller=ID** to display the IDs for the cachecades of the controller.

Example Syntax

To unblink the physical disks in cachecade 4 on controller 1, type:

```
omconfig storage cachecade action=unblink
controller=1 cachecade=4
```

omconfig Delete Cachecade

Use the following **omconfig** command syntax to delete a cachecade.

Complete Syntax

```
omconfig storage cachecade action=deletecachecade
controller=id cachecade=id
```

where *id* is the controller ID and cachecade ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage cachecade controller=ID** to display the IDs for the cachecades of the controller.

In some circumstances, you may receive a warning message. You can override this warning by using the **force=yes** parameter. In this case, the syntax is as follows:

```
omconfig storage cachecade action=deletecachecade
controller=id cachecade=id force=yes
```

Example Syntax

To delete cachecade 4 on controller 1, type:

```
omconfig storage cachecade action=deletecachecade
controller=1 cachecade=4
```

omconfig Resize Cachecade

Use the following **omconfig** command syntax to resize a cachecade by adding or removing physical disks.

Complete Syntax

```
omconfig storage cachecade action=resize
controller=id cachecade=id pdisk=<PDISKID>
```

where *id* is the controller ID and cachecade ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage cachecade controller=ID** to display the IDs for the cachecades of the controller.

Example Syntax

To resize cachecade 4, use physical disks 0 through 3 on connector 0 of controller 1.On a SAS controller, the physical disks reside in enclosure 2.

Example for SCSI, SATA, and ATA Controllers

In this example, type:

```
omconfig storage cachecade action=resize
controller=1 cachecade=4 pdisk=0:0,0:1,0:2,0:3
```

Example for SAS Controllers

In this example, type:

```
omconfig storage cachecade action=resize
controller=1 cachecade=4 pdisk=
0:2:0,0:2:1,0:2:2,0:2:3
```

omconfig Rename Cachecade

Use the following **omconfig** command syntax to rename a cachecade.

Complete Syntax

```
omconfig storage cachecade action=rename
controller=id cachecade=id name=<string>
```

where *id* is the controller ID and cachecade ID as reported by the **omreport** command. To obtain these values, type **omreport storage controller** to display the controller IDs and then type **omreport storage cachecade controller=ID** to display the IDs for the cachecades of the controller.

Example Syntax

To rename cachecade 4 on controller 1to cc4, type:

```
omconfig storage cachecade action=rename
controller=1 cachecade=4 name=cc4
```

9

Working With CLI Command Results

Server Administrator Command Line Interface (CLI) users can use the command output in various ways. This section explains how to save command output to a file and how to select a format for your command results that fits different objectives.

Table 9-1. System Availability for the omreport Command

Command Level 1	Command Level 2	Applicable To
omreport	modularenclosure	Modular system
	servermodule	Modular system
	mainsystem	Modular system
	system	Non-modular system
	chassis	Non-modular system

Output Options for Command Results

CLI command output displays to standard output on your system in a command window, in an X-terminal, or on a screen, depending on the type of your operating system.

You can redirect command results to a file instead of displaying them to standard output. Saving command output to a file allows you to use the command output for later analysis or comparison.

Whether you display command results to standard output or have the command results written to a file, you can format the results. The format you select determines the way the command output is displayed and the way the command output is written to a file.

Controlling Command Output Display

Each operating system provides a means of controlling the way that command results display to standard output. The following is a useful command for ensuring that command results do not scroll by before you can view them. The same command syntax works for the Microsoft Windows command prompt, the Red Hat Enterprise Linux terminal, and the SUSE

Linux Enterprise Server terminal. To display command output with control over scrolling, type the CLI command and append the pipe symbol followed by more. For example, type:

```
omreport system summary | more
or
omreport servermodule summary | more
```

The multiscreen system summary displays the first screen. When you want to see the next screen of command output, press the spacebar.

Writing Command Output to a File

When redirecting command results to a file, you can specify a filename (and a directory path if necessary) to which you want the command results to be written. When specifying the path to which you want your file to be written, use the appropriate syntax for your operating system.

You can save command results in two ways. You can overwrite any file that has the same name as the output file you specify, or you can keep adding results of commands to a file of the same name.

Saving Command Results to a File That Can Be Overwritten

Use the **-outc** option when you want to overwrite data stored in previously written files. For example, at 11:00 A.M. you capture fan probe RPM readings for fan probe 0 on your system and write the results to a file called **fans.txt**. You type:

```
omreport chassis fans index=0 -outc fans.txt
or
omreport mainsystem fans index=0 -outc fans.txt
```

Partial results written to the file are:

```
Index                       : 0
Status                      : OK
Probe Name                  : System Board Fan 1 RPM
Reading                     : 2380RPM
Minimum Warning Threshold   : 600RPM
Maximum Warning Threshold   : 5700RPM
Minimum Failure Threshold   : 500RPM
Maximum Failure Threshold   : 6000RPM
```

Four hours later, you repeat the command. You have no interest in the 11:00 A.M. snapshot as written to **fans.txt**. You type the same command:

```
omreport chassis fans index=0 -outc fans.txt
or
omreport mainsystem fans index=0 -outc fans.txt
```

The 3:00 P.M. data overwrites the 11:00 A.M. data in the **fans.txt** file.

Fans.txt now reads as follows:

```
Index                       : 0
Status                      : OK
Probe Name                  : System Board Fan 1 RPM
Reading                     : 3001RPM
Minimum Warning Threshold   : 700RPM
Maximum Warning Threshold   : 5500RPM
Minimum Failure Threshold   : 500RPM
Maximum Failure Threshold   : 6000RPM
```

You cannot refer to the previous command results to compare the earlier fan probe 0 output with the present output because in using the **-outc** option, you overwrote the **fans.txt** file.

Append Command Results to an Existing File

Use the **-outa** option when you want to append new command results to data stored in a previously written file. For example, at 11:00 A.M. you capture fan probe RPM readings for fan probe 0 on your system and write the results to a file called **fans.txt**. If you want to compare these results with output for the same probe obtained four hours later, you can use the **-outa** command to append the new output to **fans.txt**.

Type:

```
omreport chassis fans index=0 -outa fans.txt
or
omreport mainsystem fans index=0 -outa fans.txt
```

Fans.txt now reads as follows:

```
Index                      : 0
Status                     : OK
Probe Name                 : System Board Fan 1 RPM
Reading                    : 2380RPM
Minimum Warning Threshold  : 600RPM
Maximum Warning Threshold  : 5700RPM
Minimum Failure Threshold  : 500RPM
Maximum Failure Threshold  : 6000RPM

Index                      : 0
Status                     : OK
Probe Name                 : System Board Fan 1 RPM
Reading                    : 3001RPM
Minimum Warning Threshold  : 700RPM
Maximum Warning Threshold  : 5500RPM
Minimum Failure Threshold  : 500RPM
Maximum Failure Threshold  : 6000RPM
```

You can use a text editor to insert the time that each block of data was captured. In comparing the two snapshots for fan probe 0, you can see that the second report shows several changes. The reading of fan RPM has increased by 621 RPM but is still within normal range. Someone has raised the minimum warning threshold by 200 RPM and has decreased the maximum warning threshold by 2000 RPM.

Selecting a Format for Your CLI Command Output

You can specify a format for your CLI command results. The format determines how the command output is displayed. If the command results are directed to a file, the format is captured by the file to which you write your command results.

📝 **NOTE:** The **omconfig** command ignores most output format options and returns plain text messages. However, if you choose to display in an XML format, the **omconfig** command returns XML code.

The available formats include:

- List (lst)
- Semicolon-separated values (ssv)
- Table (tbl)
- Raw XML (xml)
- Custom delimited format (cdv)

The Syntax for the formatting option is:

```
<command> -fmt <format option>
```

For example, type:

```
omreport system summary -fmt tbl
or
omreport servermodule summary -fmt tbl
```

where **-fmt tbl** specifies table format.

You can combine the formatting option with the option to direct output to a file. For example, type:

```
omreport system summary -fmt tbl -outa summary.txt
or
omreport servermodule summary -fmt tbl -outa
summary.txt
```

where **-fmt tbl** specifies table format and **-outa** specifies that you append the command results to a file called **summary.txt**.

List (lst)

The default format is **lst** or list format. Use this format when you want to optimize output for simple readability. You need to specify a format for your command output only if you want a format other than the **lst** format.

To see the following example command output in **lst** format, type:

```
omreport system summary
or
omreport servermodule summary
```

No special formatting option is required because list format is the default display format. The network data part of the example system summary appears as follows:

```
--------------

Network Data

--------------

Network Interface Card 0 Data
IP Address: 143.166.152.108
Subnet Mask: 255.255.255.0
Default Gateway: 143.166.152.1
MAC Address: 00-02-b3-23-d2-ca
```

Table (tbl)

Use the **tbl** or table formatting option to have your data formatted in table rows and columns. To see the following example command output in table format, type:

```
omreport system summary -fmt tbl
or
omreport servermodule summary -fmt tbl
```

The example output displays as follows:

```
----------------------------
Network Interface Card 0 Data
----------------------------

| ATTRIBUTE| VALUE
| IP Address| 143.166.152.108
| Subnet Mask| 255.255.255.0
| Default Gateway| 143.166.152.1
| MAC Address| 00-02-b3-23-d2-ca
```

Semicolon-separated Values (ssv)

Use the **ssv** formatting option to deliver output formatted in semicolon-separated value format. This format also allows you to import your command output results into a spreadsheet program such as Microsoft Excel, or into a database program. To see the following example command output in semicolon-separated value format, type:

```
omreport system summary -fmt ssv
or
omreport servermodule summary -fmt ssv
```

The example output displays as follows:

```
-----------------------------
Network Data
-----------------------------

Network Interface Card 0 Data
IP Address;143.166.152.108
Subnet Mask;255.255.255.0
Default Gateway;143.166.152.1
MAC Address;00-02-b3-23-d2-ca
```

Raw XML (xml)

Use the **xml** formatting option to produce output suitable for use by systems management applications or for input into other applications that use XML. To see the following example command output in raw XML format, type:

```
omreport system summary -fmt xml
or
omreport servermodule summary -fmt xml
```

The example output displays as follows:

```
<NICStatus>1</NICStatus><IPAddress>143.166.152.10
8</IPAddress><SubnetMask>255.255.255.0</SubnetMas
k><DefaultGateway>143.166.152.1</DefaultGateway><
MACAddr>00-02-b3-23-d2-ca</MACAddr>
```

Custom Delimited Format (cdv)

Use the **cdv** formatting option to report exported data in custom delimited format. You can specify this option with any **omreport** command. For example, to generate a system summary in custom delimited format, type:

```
omreport system summary -fmt cdv
or
omreport servermodule summary -fmt cdv
```

You can also set preferences for the custom delimited format with the **omconfig** command. The valid values for delimiters are: exclamation, semicolon, at, hash, dollar, percent, caret, asterisk, tilde, question, colon, comma, and pipe.

The following example shows how to set the delimiter for separating data fields to asterisk:

```
omconfig preferences cdvformat delimiter=asterisk
```

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