Dell EMC OpenManage Command Line Interface Guide

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Notes, cautions, and warnings

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

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Introduction

OpenManage Server Administrator (OMSA) provides a comprehensive, one-to-one systems management solution through either an integrated Web browser-based graphical user interface (GUI) or a command line interface (CLI). Server Administrator is designed for system administrators to manage systems locally and remotely on a network. It allows system administrators to manage their entire network by providing a comprehensive one-to-one systems management.

In the context of Server Administrator, a system refers to a stand-alone system, a system with attached network storage units in a separate chassis, or a Blade system consisting of one or more server modules in a modular enclosure.

Server Administrator provides easy-to-use management and administration of local and remote systems through a comprehensive set of integrated management services. Server Administrator is the sole installation on the system being managed and is accessible both locally and remotely from the Server Administrator home page. Server Administrator enables you to access remotely monitored systems by dial-in, LAN, or wireless connections.

The configuration features enable 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.

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

NOTE: The CLI does not use the Server Administrator Web server. For concerns on encryption, from the CLI, run the `omconfig system webserver action=stop` command to turn off the Web server. The Web server starts automatically after a reboot, so you must run this command each time the system is rebooted. . For more information, see omconfig system webserver or omconfig servermodule webserver.

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

NOTE: For information on terms used in this document, see the *Glossary* at `dell.com/support/manuals`.

Topics:

What is new in this release

The release highlights of OpenManage Server Administrator are:

- Support for the following operating systems:
  - Red Hat Enterprise Linux 8.2 and Red Hat Enterprise Linux 8.3.
  - Red Hat Enterprise Linux 7.8 and Red Hat Enterprise Linux 7.9.
  - Suse Linux Enterprise Server 15 SP2.
  - VMWare ESXi 7.0 and VMWare ESXi 7.0 U1.
- Supported network cards are:
  - Marvell QLogic Fibre Channel Single Port 32GFC PCIe Gen4 x8 Adapter
  - Marvell QLogic Fibre Channel Dual Port 32GFC PCIe Gen4 x8 Adapter
  - Intel(R) Ethernet 25G 2P E810-XXV OCP

- Intel(R) Ethernet 25G 2P E810-XXV Adapter
- Intel(R) Ethernet 10G 4P X710/I350 rNDC
- Intel FPGA Programmable Acceleration Card D5005
- Dual Port 10Gb Ethernet (BCM57810S) LOM (FC430)
- QLogic 57810S-K Dual Port 10Gb bNDC KR CNA
- QLogic 57810S-K Dual Port 10Gb bNDC KR CNA
- QLogic 57840S-K Quad Port 10Gb bNDC KR CNA
- Broadcom BCM57504 25G KR Quad Port Fab AB Mezz

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

NOTE: From 9.3.0, the RPM packages in Server Administrator are signed with a new Dell SHA-512 signature key. If using non interactive or silent method of installation, to verify the authenticity, you must download the key from the following location: https://linux.dell.com/repo/hardware/dsu/public_gpg3.key, and then import the key to each host with `rpm --import <key file>` before installing or upgrading to the current version of Server Administrator. Once the key is imported, you are not required to import the key every time while installing, or upgrading to the current version of Server Administrator.

Supported operating systems

- Red Hat Enterprise Linux 8.2 and Red Hat Enterprise Linux 8.3
- Red Hat Enterprise Linux 7.8 and Red Hat Enterprise Linux 7.9
- SUSE Linux Enterprise Server 15 SP2
- Ubuntu 20.04 64 bit
- VMWare ESXi 6.7 U3, VMWare ESXi 7.0 and VMWare ESXi 7.0 U1
- Microsoft Windows 2012 R2
- Microsoft Windows 2016
- Microsoft Windows 2019

Accessing the windows command prompt to run CLI commands

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

- Click **Start** > **Programs** > **Accessories** > **Command Prompt**.
- Click **Start** > **Run** and type `cmd.exe`.

NOTE: Do not type `command` in 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 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 actions that the system must perform when a certain warning or failure event occurs. You can also use the `omconfig` command to assign specific values to the 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 displays reports of the management information of the system.

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

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

Related Links: Working With CLI Command Results

CLI error checking and error messages

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

Success Messages

When you type a successful `omconfig` command, data for that component is displayed.

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

Table 1. Commands And Messages

Command	Message
`omconfig chassis temps index=0 warnthresh= default`	`Temperature probe warning threshold value(s) set successfully.`
`omconfig chassis biossetup attribute=numlock setting=on`	`BIOS setup configured successfully. Change will take effect after the next reboot.`
`omconfig system assetinfo info=depreciation duration=6`	`omconfig system assetinfo info=depreciation duration=6`

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 required to execute the command successfully.

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

The following are examples of some failure messages:

Table 2. Failure messages

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

Table 2. Failure messages (continued)

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.`

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

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

Table 3. Error messages for commands with three decimals

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 Using CLI

The Server Administrator CLI allows administrators to write batch programs for the operating system. For an enterprise with many systems, an administrator could write a configuration script that specifies the warning thresholds for each major component of a system and also specifies a set of actions that the administrator wants each system to take in case of a warning or failure event. In 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 re-configuration.

A similar scenario is used to populate a large number of newly acquired systems with detailed asset information. Much of the information are the same, such as the manufacturer or lessor of the system, whether support for the system is outsourced, name of the company providing insurance for the system, method of depreciation, and so on. Any variable that is common to all systems is scripted, sent to all managed systems, and executed. Asset information that is unique to a system is 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 the 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 are executed, they can capture reports on components of interest, such as fan RPMs during periods of highest system usage compared with the same measurements at times of lowest system usage. Command results are routed to a file for later analysis. Reports can help administrators gain information that are 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 display a very brief summary. The summary shows version information for the systems management software installed on the 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
```

In this example, 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, the following command displays a list of alert actions that are configured for components on a system.

```
omreport system alertaction
```

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

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

The following is 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 chapter of this document, command syntax and other information about the commands are formatted using any of the following fields as appropriate:

Table 4. Command syntax

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

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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.

Topics:

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 -?`, the CLI help lists all the subcommands available for `omconfig system`:

- alertaction
- alertlog
- assetinfo
- cmdlog
- esmlog
- events
- platformevents
- pedestinations
- recovery
- shutdown
- thrmshutdown
- webserver

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 the 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).

The following table displays the optional parameters for `info=acquisition`:

Table 5. 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 the system components. You can also retrieve summaries for many system components at one time, or 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. The fields are defined only if they have a special or less familiar use.

As with all other components, 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.

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

The `omreport` commands available on the system depend on the system configuration. The following table lists the systems on which the omreport commands are applicable:

Table 6. System Availability For The omreport Command

Command Level 1	Command Level 2	Applicable To
omreport	modularenclosure	Blade systems
	servermodule	Blade systems
	mainsystem	Blade systems
	system	Rack and Tower systems
	chassis	Rack and Tower systems
	preferences	Blade or Rack, and Tower systems

Topics:

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 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

Depending on the 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, the `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.

The following table provides a high-level summary of the `omreport` command. The column titled **Command level 1** displays the `omreport` command at its most general use. **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 to view reports. `User privilege required` refers to the type of privilege you need to run the command, where U = User, P = Power User, and A = Administrator. **Use** is a very general statement about the actions performed using `omreport`.

The following table lists the `omreport` commands available for about, system, and main system chassis.

Table 7. Command Level 1, Level 2, And Level 3 For omreport

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

Table 7. Command Level 1, Level 2, And Level 3 For omreport (continued)

Command Level 1	CommandLevel 2	Command Level 3	User Privilege Required	Use
				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	Displays the Field Replaceable Unit (FRU) information.
		hwperformance	U, P, A	Displays the status and cause for the system's performance degradation.
		info	U, P, A	Displays a status summary for main system chassis components.
		intrusion	U, P, A	Displays the status of the system's intrusion sensor(s).
		leds	U, P, A	Displays the properties you have set for light-emitting diodes to flash under various alert conditions.
		memory	U, P, A	Displays properties of the system's memory arrays.
		nics	U, P, A	Displays the NIC and Team interface properties.
		ports	U, P, A	Displays the properties for the system's parallel and serial ports, such as I/O address, IRQ level, connector type, and maximum speed.
		processors	U, P, A	Displays properties of the system's processors, including speed, manufacturer, and processor family.
		pwrmanagement	U, P, A	Displays power inventory details such as system idle power, system maximum potential power, and

Table 7. Command Level 1, Level 2, And Level 3 For omreport (continued)

Command Level 1	CommandLevel 2	Command Level 3	User Privilege Required	Use
				power budget information.
		pwrmonitoring	U, P, A	Displays properties of power consumption.
		pwrsupplies	U, P, A	Displays the properties of power supplies.
		remoteaccess	U, P, A	Displays general information on remote access.
		slots	U, P, A	Displays the properties of the system's expansion slots and other slot types.
		temps	U, P, A	Displays the status and thresholds for the system temperature sensors.
		volts	U, P, A	Displays the status and thresholds for the system voltage sensors.
		removableflashmedia	U, P, A	Displays the system's virtual flash (vFlash) and secure digital (SD) card details.
	licenses		U, P, A	Displays the digital licenses of the installed hardware devices of the system.
	storage		U, P, A	See Using The Storage Management Service.
	system or servermodule		U, P, A	Displays a high-level summary of system components.
		alertaction	U, P, A	Displays the warning and failure threshold values, as well as actions configured when an essential component detects a warning or failure state.
		alertlog	U, P, A	Allows the administrator to display the alert log.
		assetinfo	U, P, A	Displays the cost of ownership information for the system.
		cmdlog	U, P, A	Allows the administrator to display the command log.

Table 7. Command Level 1, Level 2, And Level 3 For omreport (continued)

Command Level 1	CommandLevel 2	Command Level 3	User Privilege Required	Use
		esmlog	U, P, A	Allows the administrator to display the hardware log.
		events	U, P, A	Displays the system's Simple Network Management Protocol (SNMP) event settings.
		operatingsystem	U, P, A	Displays the name and version of the operating system.
		pedestinations	U, P, A	Displays the destinations to send the configured alerts for platform events.
		platformevents	U, P, A	Displays the system's response for each listed platform event
		recovery	P, A	Displays how the system is configured to respond to a hung operating system.
		shutdown	P, A	Displays how to perform the shutdown action.
		summary	U, P, A	Displays the key facts for all system components, including main system chassis, software, and storage.
		thrmshutdown	P, A	Displays how to perform the shutdown action, if any, when a temperature warning or failure condition is detected.
		version	U, P, A	Displays a summary for all updatable components on the system.
	preferences	webserver	U, P, A	Displays the URL information of the Server Administrator Web server.
		messages	A	Displays the configured alert message format.

Related Links: omreport: Viewing System Status Using The Instrumentation Service

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 Blade system. Type:

```
omreport modularenclosure
```

NOTE: This CLI command is available when OpenManage Server Administrator is installed on Dell Blade 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 the system.

Table 8. Output

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 managementfunctions 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

Table 8. Output (continued)

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 the system. The following is an example output from the `omreport about` command:

Table 9. `omreport about` command

Product name	: Dell OpenManage Systems Management Software (64-Bit)
Version	: *x.x.x*
Copyright	: Copyright (C) Dell Inc. *xxxx-xxxx*. All rights reserved.
Company	: Dell Inc.
Latest Version	: *x.x.x*
Download Link	: https://www.dell.com/support/home/us/en/04/drivers/driversdetails?driversId=xxxxx

```
iDRAC Service Module(iSM) is a lightweight software service that better integrates
operating system (os) related features with iDRAC and can be installed on DELL EMC 12
PowerEdge servers. iSM has very little impact on the host processor and smaller memory
footprint than "in-band" agents such as DELL EMC OpenManage Server Administrator (OMSA)
agent into supported host operating systems. Refer here for more details: https://
www.dell.com/support/article/us/en/04/sln310557/dell-emc-idrac-service-module
```

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 following output is an example, and can change depending on the system's configuration and the version of Server Administrator installed on the system:

Table 10. Contains field

Contains:	Apache Tomcat webserver 9.x.x Broadcom SNMP Agent 17.x.x Common Storage Module 4.x.x Data Engine 7.x.x Hardware Application Programming Interface 9.x.x Instrumentation Service 9.x.x Instrumentation Service Integration Layer 9.x.x Inventory Collector 18.12.xxx OMACS 9.x.x Oprating System Logging 9.x.x Oracle Java Runtime Environment 10.x.x Remote Access Controller Managed Node 9.x.x Server Administrator Common Framework 9.x.x Server Administrator Core Files 9.x.x (xxxx) Server Administrator Instrumentation files 9.x.x Server Instrumentation SNMP Module 9.x.x Server Instrumentation WMI Module 9.x.x Storage Management 6.x.x

Omreport Chassis Or Omreport Mainsystem Commands

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

```
omreport chassis
```

or

```
omreport mainsystem
```

Server Administrator displays a general status for the main system chassis or main system components.

Table 11. General status

Health	
Main System Chassis	
SEVERITY	: COMPONENT
Ok	: Fans
Critical	: Intrusion
Ok	: Memory
Ok	: Power Supplies
Ok	: Temperatures
Ok	: Voltages

Chassis management

On servers with Dell PowerEdge FX2 series chassis, when **Chassis Management at Server Mode** is set to **Monitor** or **Manage and Monitor** in CMC, OMSA displays **Chassis Management at Server Mode** as **Enabled** and displays the Fans, Power Supplies, and Temperature sensor details. The sensor details are read-only. When **Chassis Management at Server Mode** is set to **None** in CMC, OMSA displays **Chassis Management at Server Mode** as **Disabled** and displays only the server temperature sensors (not chassis temperature sensors).

Related Links

- omreport chassis fans or omreport mainsystem fans
- omreport chassis pwrsupplies or omreport mainsystem pwrsupplies
- omreport chassis temps or omreport mainsystem temps

Omreport chassis acswitch or omreport mainsystem acswitch

Use the `omreport chassis acswitch or omreport mainsystem acswitch` command if the 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:

Table 12. Server administrator output

AC Failover Switch	
AC Switch Redundancy	
Redundancy Status	: Full
Number of devices required for full redundancy	: 2
Redundancy Mode	:
Redundancy Configuration	: Input Source Line 1, upon 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 Or 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
```

Omreport Chassis Bios Or Omreport Mainsystem Bios

Use the `omreport chassis bios` or `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 the system.

Omreport chassis biossetup or 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. Change the user scripts as applicable.

To view the BIOS Setup parameters in short form, type:

```
omreport chassis biossetup display=shortnames
```

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

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

NOTE: The `bootorder` attribute is applicable only on systems prior to YX2X. To list the device boot order, type `omreport chassis biossetup` and serach the list under **BIOS Boot Settings** or **UEFI Boot Settings** depending on the BIOS boot setting.

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

To list the device boot order, type `omreport chassis biossetup` and search the list under **BIOS Boot Settings** or **UEFI Boot Settings** depending on the BIOS boot setting.

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

BIOS setup groups

The following table lists the available groups of the BIOS setup parameters on PowerEdge systems.

NOTE: Based on the hardware configuration, the attributes may vary in a specific group.

Table 13. BIOS Setup Groups

Group	Description
BIOS Option Settings	Controls the BIOS start settings when **bootmode** is set to **bios**.
Boot Settings	Controls the system boot settings when **bootmode** is set to **bios**.
Integrated Devices	Controls the devices integrated on the system board.
Memory Settings	Controls the system memory settings.
Miscellaneous Settings	Controls some miscellaneous system settings.
Network Settings	Controls the network settings of the system.
One-Time Boot **NOTE:** This group is not supported on YX3X systems.	Supports one-time boot to a specified device.
Processor Settings	Controls the processor settings of the system.
SATA Settings	Control the embedded SATA ports settings.

Table 13. BIOS Setup Groups (continued)

Group	Description
Serial Communication	Controls the Serial Communication options.
Slot Disablement	Controls the system slots that are present on the system.
System Information	Displays the information that uniquely identifies the system.
System Profile Settings	Controls the power management settings.
System Security	Controls the security features of the system.
UEFI Boot Settings	Controls the system boot settings when boot mode is set to **uefi**.

Omreport Chassis Currents Or Omreport Mainsystem Currents

This command is no longer available through Server Administrator.

Omreport chassis fans or 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 are present on the system. If you specify the index, Server Administrator displays a summary for a specific fan probe.

NOTE: On servers in the Dell PowerEdge FX2 series chassis, this command is supported only if the **Chassis Management at Server Mode** is set to either **Monitor** or **Manage and Monitor** in the CMC, and Server Administrator displays the **Chassis Management at Server Mode** as **Enabled**. For more details, see Chassis Management.

Omreport Chassis Firmware Or Omreport Mainsystem Firmware

Use the `omreport chassis firmware` or `omreport mainsystem firmware` command to view current firmware properties. When you type:

```
omreport chassis firmware
```

or

```
omreport mainsystem firmware
```

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

NOTE: To maintain consistency across the commands, the output format of this command has changed. Change the user scripts as applicable.

NOTE: If iDRAC is installed, Server Administrator displays the Lifecycle Controller version. If BMC is installed, Server Administrator displays the Unified Server Configurator (USC) version.

Omreport Chassis Frontpanel Or 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 the system, check 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 the system, check whether the `NMI` button is enabled or not. Use the `NMI` button 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 Or 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 the 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 or 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 chassis hwperformance
```

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

NOTE: This command is applicable only to selected Dell 10G systems that support PMBus.

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

Table 14. System configuration output

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

Omreport Chassis Info Or Omreport Mainsystem Info

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

```
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.

NOTE: If iDRAC is installed, Server Administrator displays the Lifecycle Controller version. If BMC is installed, Server Administrator displays the USC version.

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

Table 15. System configuration output

Index	: 0
Chassis Name	: Main System Chassis
Host Name	: WIN-27C02UQFV6L
iDRAC7 Version	: 1.00
Chassis Model	: PowerEdge R720
Chassis Lock	: Present
Chassis Service Tag	: 7654321
Express Service Code	: 15608862073
Chassis Asset Tag	: c

Omreport Chassis Intrusion

Use the `omreport chassis intrusion` command to find out whether the cover of the 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 is displayed:

Table 16. Output

Intrusion Information	
Health	: Ok
Index	: 0
Status	: OK
Probe Name	: Intrusion
State	: Chassis is closed

Table 17. Output

Intrusion Information	

Table 17. Output (continued)

Health	: Ok
Index	: 1
Status	: OK
Probe Name	: Drive Bay
State	: Bay is open

Omreport Chassis Leds Or 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:

Table 18. Output

Main System Chassis	
Flash chassis identify LED state	: Off
Flash chassis identify LED timeout value	: 300

Omreport Chassis Memory Or Omreport Mainsystem Memory

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

The following is an example output:

Table 19. Output

Memory Information	
Health	: Ok
Attributes of Memory Array(s)	
Location	: System Board or Motherboard
Use	: System memory

Table 19. Output (continued)

Installed Capacity	: 65536 MB
Maximum Capacity	: 786432 MB
Slots Available	: 24
Slots Used	: 8
Error Correction	: Multibit ECC
Total of Memory Array(s)	
Total Installed Capacity	: 65536 MB
Total Installed Capacity Available to the OS	: 64386 MB
Total Maximum Capacity	: 786432 MB
Details of Memory Array 1	
Index	: 0
Status	: Ok
Status	: Ok
Status	: Ok
Connector Name	: DIMM_A1
Type	: DDR3 - Synchronous Registered (Buffered)
Size	: 8192 MB
Index	: 1
Status	: Ok
Connector Name	: DIMM_A2
Type	: DDR3 - Synchronous Registered (Buffered)
Size	: 8192 MB
Index	: 2
Status	: Ok
Connector Name	: DIMM_A3
Type	: DDR3 - Synchronous Registered (Buffered)
Size	: 8192 MB
Index	: 3
Status	: Ok
Connector Name	: DIMM_A4
Type	: DDR3 - Synchronous Registered (Buffered)
Size	: 8192 MB

If you specify the index, Server Administrator displays a summary for a specific memory module displaying the health, status, device name, type, speed, rank, and failures. A rank is a row of dynamic random access memory (DRAM) devices comprising 64 bits of data per Dual Inline Memory Module (DIMM). The possible values of rank are `single`, `dual`, `quad`, `octal`, and `hexa`. The rank displays the rank of the DIMM and helps in the easy service of DIMMs on the server.

The following is an example output if you specify the `index`:

Table 20. Index detail

Memory Device Information	
Health : Ok	
Status	: Ok
Device Name	: A2
Size	: 16384 MB
Type	: DDR4 Synchronous Registered (Buffered)
Speed	: 0.38 ns
Rank	: Dual
Failures	: None
Technology	: DRAM
Volatile Size	: 1717989184
Non-Volatile Size	: N/A
Cache Size	: N/A
Remaining Rated Write Endurance	: 23%

Use the `Omreport chassis memory index` to view details of memory device properties of a particular connector using its index number. If the system supports redundant memory, this command also displays the status, device name, speed, and type of memory redundancy implemented on the system. Type:

```
omreport chassis memory index=n speedunit=mtps
```

or

```
omreport chassis memory index=n speedunit=ns
```

The `speedunit` parameter is optional. If you do not specify the `speedunit`, Server Administrator displays the speed in ns (Default output).

Table 21. Speedunit detail

Memory Device Information	
Health	: Ok
Status	: Ok
Device Name	: A2
Size	: 4096 MB
Type	: DDR4 Synchronous Registered (Buffered)
Speed	: 0.47 ns
Rank	: Single
Failures	: None

If you specify the speedunit MT/s, Server Administrator displays the speed in MT/s.

Table 22. Speedunit detail

Memory Device Information	

Table 22. Speedunit detail (continued)

Health	: Ok
Status	: Ok
Device Name	: A2
Size	: 4096 MB
Type	: DDR4 Synchronous Registered (Buffered)
Speed	: 2133 MT/s
Rank	: Single
Failures	: None

NOTE: To maintain consistency across the commands, the output format of this command and the subsequent command levels has changed. Change the user scripts as applicable.

Omreport chassis nics or omreport mainsystem nics

Use the `omreport chassis nics` or `omreport mainsystem nics` command to view NIC and Team interface details. On XenServer, the command displays all the installed NICs, regardless of driver installation.

NOTE: The order in which devices are detected is not guaranteed to match the physical port ordering of the device.

To view NIC properties, type:

```
omreport chassis nics index=n
```

or

```
omreport chassis nics index=n
```

The `index` parameter is optional. If you do not specify the index, Server Administrator displays properties of all NICs on the 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`.

NOTE: The Fibre Channel over Ethernet (FCoE) and iSCSI over Ethernet (iSCSI Offload Engine) features of Converged Network Adapter (CNA) cards are not supported on VMware ESX and VMware ESXi systems.

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 is configured using NIC vendor tools, such as Broadcom.

NOTE: On systems running Linux operating systems with kernel versions earlier than 3.10, Team Interface speed is not displayed.

The `index` parameter is optional. If you do not specify the index, Server Administrator displays details of all the Team interfaces on the 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 Or omreport Mainsystem Ports

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

NOTE: CMC USB ports attached with blade servers are not enumerated by OMSA.

Server Administrator displays values for the following fields: `Port Type`, `External Name`, `Base I/O Address`, `IRQ Level`, `Connector Type`, and `Maximum Speed`. The following table provides the description of the fields:

Table 23. Fields and Description

Field	Description
Port Type	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	Name of the port, such as serial or parallel, USB, mouse, keyboard, and so on.
Base I/O Address	Starting I/O address expressed in hexadecimal.
IRQ Level	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	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	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 Or Omreport Mainsystem Processors

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

Server Administrator displays values for the following fields: `Index`, `Status`, `Connector Name`, `Processor Brand`, `Processor Version`, `Current Speed`, `State`, and `Core Count`.

The following table provides the description of the fields.

Table 24. Fields and Description

Field	Description
Index	Processor number
Status	Current status of the processor.
Connector Name	Name or number of the device that occupies the processor slot in the system.
Processor Brand	Type of processor made by a manufacturer such as Intel Itanium, Intel Pentium III, Intel Xeon, or AMD Opteron.
Processor Version	Model and stepping number of the processor.
Current Speed	Actual processor speed in MHz at system boot time.

Table 24. Fields and Description (continued)

Field	Description
State	Whether the processor slot is enabled or disabled.
Core Count	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 table lists the fields that are defined for the capabilities present on a particular microprocessor:

Table 25. Microprocessors and Fields

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

The following table displays the fields that are displayed for each cache on a particular processor:

Table 26. Fields And Description

Field	Description
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 is built into the processor or resides 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).

Table 26. Fields And Description (continued)

Field	Description
Speed	Refers to the rate at which the cache can forward data from the main memory to the processor.
Max Size	Maximum amount of memory that the cache can hold in kilobytes.
Installed Size	Actual size of the cache.
Type	Indicates whether the cache is primary or secondary.
Location	Location of the cache on the processor or on a chipset outside the processor.
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 store at any location in the cache. • A *n*-way set-associative cache directly maps *n* specific lines of memory to the same *n* lines of cache. For example, line 0 of any page in memory is stored in line 0 of cache memory.
Cache Device Supported Type	Type of static random access memory (SRAM) that the device can support.
Cache Device Current Type	Type of the currently installed SRAM that the cache is supporting.
External Socket Name Silk Screen Name	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.

Omreport chassis pwrmanagement or omreport mainsystem pwrmanagement

Use the `omreport chassis pwrmanagement` or `omreport mainsystem pwrmanagement` command to view the power budget cap and power management profiles of the 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.

NOTE: The `omreport chassis pwrmanagement` or `omreport mainsystem pwrmanagement` command is applicable on PowerEdge 11G systems that support Power Management Bus (PMBus) and that have hot-swappable power supplies and not systems that have a fixed, non-redundant power supply installed.

The output of the `omreport chassis pwrmanagement` or `omreport mainsystem pwrmanagement` command lists each of the valid parameters. The following table lists the available settings.

Table 27. Valid Parameters Of Omreport Chassis Pwrmanagement Or Omreport Mainsystem Pwrmanagement

name=value pair	Description
`unit=<watt | btuphr>`	Displays power in the user-specified units.
`config=budget`	Displays power budget information.
`config=profile`	Displays power profiles information. **NOTE:** On PowerEdge 12G systems, `profile` option is `SysProfile` and is grouped under **System Profile Settings** of the BIOS setup group. For more information, see BIOS Setup Settings on PowerEdge 12G systems.

For each power management profile in the system, values display for the following fields: `Maximum Performance`, `Active Power Controller`, `OS Control`, and `Custom`.

The Custom attributes are: `CPU Power and Performance Management`, `Memory Power and Performance Management`, and `Fan Power and Performance Management`.

The following is an example output:

Table 28. Output

`Power Inventory and Budget`	
`Power Inventory`	
`System Idle Power`	`: 92 W`
`System Maximum Potential Power`	`: 344 W`
`Power Budget`	
`Attribute`	`: Enable Power Cap`
`Values`	`: Enabled`
`Attribute`	`: Power Cap`
`Values`	`: 400 W (56%)`

NOTE: Power budget requires license to report the details. If the appropriate license is not installed or has expired, the system does not display the power budget details. For more information, see the *Dell License Manager Guide* at `dell.com/support/manuals`.

Omreport chassis pwrmonitoring or omreport mainsystem pwrmonitoring

Use the `omreport chassis pwrmonitoring` or `omreport mainsystem pwrmonitoring` command to view the properties of the 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 from PowerEdge 10G system onwards that support PMBus and that have hot-swappable power supplies and not systems that have a fixed, non-redundant power supply installed.

NOTE: Power monitoring requires license to report the details. If the appropriate license is not installed or has expired, the system does not display the power consumption details of the system. For more information, see the *Dell License Manager* at Guide **dell.com/openmanagemanuals**.

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.

An example output reporting power statistics in Watts is as follows:

Table 29. Power statistics in watts

Power Consumption Information	
Power Consumption	
Index	: 1
Status	: Ok
Probe Name	: System Board Pwr Consumption
Reading	: 539W
Warning Threshold	: 994W
Failure Threshold	: 1400 W
Amperage	
PS1 Current 1	: 1.2 A
Power Headroom	
System Instantaneous Headroom	: 300 W
System Peak Headroom	: 340 W
Power Tracking Statistics	
Statistic	: Energy consumption
Measurement Start Time	: Thu May 28 11:03:20 2011
Measurement Finish Time	: Fri May 28 11:05:46 2011
Reading	: 5.9 KWH
Statistics	: System Peak Power
Measurement Start Time	: Mon May 18 16:03:20 2011
Peak Time	: Wed May 27 00:23:46 2011
Peak Reading	: 630 W

Table 29. Power statistics in watts (continued)

Statistics	: System Peak Amperage
Measured Since	: Mon May 18 16:03:20 2011
Read Time	: Tue May 19 04:06:32 2011
Peak Reading	: 2.5 A

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.

Omreport chassis pwrsupplies or omreport mainsystem pwrsupplies

Use the `omreport chassis pwrsupplies` or `omreport mainsystem pwrsupplies` command to view properties of the 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. Change the user scripts as applicable.

NOTE: On servers in the Dell PowerEdge FX2 series chassis, this command is supported only if the **Chassis Management at Server Mode** is set to either **Monitor** or **Manage and Monitor** in the CMC, and Server Administrator displays the **Chassis Management at Server Mode** as **Enabled**. For more details, see Chassis Management.

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

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

Omreport Chassis Remoteaccess Or 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` or `omreport mainsystem remoteaccess` command lists each of the valid parameters as displayed in the following table:

Table 30. Valid Parameters Of Omreport Chassis Remoteaccess Or Omreport Mainsystem Remoteaccess

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

Omreport Chassis Removableflashmedia Or 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 the system's removable flash media information.

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

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

Table 31. Output status

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

Table 31. Output status (continued)

Type	: vFlash SD Card
State	: Present
Available Size	: 472 MB
Storage Size	: 512 MB

Omreport Chassis Slots Or Omreport Mainsystem Slots

Use the `omreport chassis slots` or `omreport mainsystem slots` command to view properties of the 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 the 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. Change the user scripts as applicable.

For each slot in the system, values display for the following fields given in the following table:

Table 32. Valid Parameters Of Omreport Chassis Slots Or Omreport Mainsystem Slots

Field	Description
Index	Number of the slot in the system.
Slot ID	Silk screen name printed on the system's motherboard next to the slot. Alphanumeric text uniquely identifies each slot in the system.
Adapter	Name and/or type of the card that fits into the slot, for example, a storage array controller, SCSI adapter, iDRAC Enterprise, or HBA.
Data Bus Width	Width, in bits, of the information pathway between the components of a system. The range of the data bus width is from 16 to 64 bits.

Omreport chassis temps or Omreport mainsystem temps

Use the `omreport chassis temps` or `omreport mainsystem temps` command to view properties of the 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 are present on the system. If you specify the index, Server Administrator displays the summary for a specific temperature probe.

NOTE: On servers in the Dell PowerEdge FX2 series chassis, this command is supported only if the **Chassis Management at Server Mode** is set to either **Monitor** or **Manage and Monitor** in the CMC, and Server Administrator displays the **Chassis Management at Server Mode** as **Enabled**. For more details, see Chassis Management.

Omreport Chassis Volts Or Omreport Mainsystem Volts

Use the `omreport chassis volts` or `omreport mainsystem volts` command to view properties of the 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 are present on the system. If you specify the index, Server Administrator displays a summary for a specific voltage probe.

Omreport Licenses

Use the `omreport licenses` command to view the digital licenses of the hardware devices installed on the system. Type:

```
omreport licenses
```

The following is an example output from the `omreport licenses` command:

Table 33. `omreport licenses` command

Device Index	: 0
Device Status	: Ok
Device	: iDRAC7
Device Description	: iDRAC
Device ID	: xxxx
License Index	: 0
Description	: iDRAC7 Enterprise Evaluation License
Status	: OK
Recommended Action	: N/A
License Type	: Evaluation
EntitlementID	: xxxx
Expiry Date	: yyyy-mm-dd hh:mm:ss

Omreport System Commands Or 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 Or Omreport Servermodule

Use the `omreport system` or `omreport servermodule` command to see a general status of the components of the system. When you specify a level 3 command, such as `omreport system shutdown` or `omreport servermodule`

`shutdown`, you 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 the system has both a main system chassis or main system and at least one direct attached storage device, Server Administrator may display a summary that resembles the following example:

Table 34. System and attached storage

SEVERITY	: COMPONENT
Ok	: Main System Chassis

Commands for viewing logs

Use the `omreport system` or `omreport servermodule` command to view the following 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), you must clear the log and resolve the issue. To clear the log, 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. For more information about clearing logs, see Commands For 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 run the `omreport system esmlog` or `omreport servermodule esmlog` command, the ESM log is displayed. 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 is displayed:

```
Health: Non-Critical
```

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

Omreport System Alertaction Or 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 the 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.

NOTE: To maintain consistency across the commands, the output format of this command has changed. Change the user scripts as applicable.

Components and events having view alert actions

View alert action properties for the following components and events, if the components or 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 blade systems.

NOTE: System Power Probe Warning is not applicable to blade systems.

Omreport System Assetinfo Or 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.

Omreport system events or omreport servermodule events

Use the `omreport system events` or `omreport servermodule events` command to view the currently enabled or disabled SNMP traps. Type:

```
omreport system events
```

or

```
omreport servermodule events
```

This command displays a summary of each component in the system for which events are generated. For each component, the report shows which severities are set to report and which severities are set not to report. The following is an example output for a few components:

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

The full report lists the settings for all components in the system for which events are generated.

Omreport System Events Type Or Omreport Servermodule Events Type

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. Type:

```
omreport system events type=fans
```

or

```
omreport servermodule events type=fans
```

This command displays a summary of each component in the system for which events are generated.

The following table displays the events displayed for various component types.

Table 35. Valid Parameters Of Omreport System Events Type Or Omreport Servermodule Events 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
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

The following is an example output:

```
Current SNMP Trap Configuration
-------
System
-------
Settings
Enable: Informational, Warning, and Critical
Disable: None
-----------
Fans Group
----------
Settings
Enable: Informational, Warning, and Critical
Disable: None
-----------
Individual Objects
-----------
System Board Fan1 RPM Settings
Index:0
Enable: Informational, Warning, and Critical
Disable: None
System Board Fan2 RPM Settings
Index:1
```

```
Enable: Informational, Warning, and Critical
Disable: None
```

Omreport System snmptrapdest Or Omreport Servermodule snmptrapdest

Use the `omreport system snmptrapdest` or `omreport servermodule snmptrapdest` command to view the configured SNMP trap destinations.

When the system is configured with the IP destinations, the following list of IP address is displayed:

```
Destination1 : <ip address1>
Destination2 : <ip address2>
Destination3 : <ip address3>
```

Omreport System Operatingsystem Or Omreport Servermodule Operatingsystem

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

Omreport System Pedestinations Or Omreport Servermodule Pedestinations

Use the `omreport system pedestinations` or `omreport servermodule pedestinations` command to view destinations where alerts are sent for platform events. Depending on the number of destinations displayed, 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. Change the user scripts as applicable.

Destination configuration settings for the Omreport system pedestinations or Omreport servermodule pedestinations

The actual number of destinations that you can configure on a system using omreport system pedestinations or omreport servermodule pedestinations may differ.

The following table displays the available settings.

Table 36. Settings For The Omreport System Pedestinations Or Omreport Servermodule Pedestinations

Output	Attributes	Description
Destination List		
	Destination Number: Destination1	**destination 1**: Displays the first destination. Example:

Table 36. Settings For The Omreport System Pedestinations Or Omreport Servermodule Pedestinations (continued)

Output	Attributes	Description
		101.102.103.104: IPv4 address of the first destination.
	Destination Number: Destination 2	**destination 2**: Displays the second destination. Example: **110.120.130.140**: IPv4 address of the second destination.
	Destination Number: Destination 3	**destination 3**: Displays the third destination. Example: **201:202:203:204**: IPv4 address of the third destination.
	Destination Number: Destination 4	**destination 4**: Displays the fourth destination. Example: **210.211.212.213**: IPv4 address of the fourth destination.
	Destination Number: Destination 5	**destination 5**: Displays the fifth destination. Example: **2001:0db8:85a3:0000:0000:8a2e:0370:7334**: IPv6 address of the fifth destination.
	Destination Number: Destination 6	**destination 6**: Displays the sixth destination. Example: **2001:0db8:85a3:0000:0000:8a2e:0370:7334**: IPv6 address of the sixth destination.
	Destination Number: Destination 7	**destination 7**: Displays the seventh destination. Example: **210.211.212.213**: IP address of the seventh destination.
	Destination Number: Destination 8	**destination 8**: Displays the eighth destination. Example: **210.211.212.213**: IP address of the eighth 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 .

NOTE: On 12G systems with iDRAC7 specific versions, **ipaddress** can also be a Fully Qualified Domain Name (FQDN).

Omreport System Platformevents Or 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. Change the user scripts as applicable.

Omreport System Recovery Or 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 Or Omreport Servermodule Shutdown

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

Omreport System Summary Or 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 the system. Type:

```
omreport system summary
```

or

```
omreport servermodule summary
```

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

NOTE: If iDRAC is installed, Server Administrator displays the LCC version. If BMC is installed, Server Administrator displays the USC version.

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

Table 37. Command results

System Summary	

Software Profile	

Systems Management	
Name	: Dell OpenManage Systems Management Software (64-Bit)
Version	: *x.x.x*
Description	: Systems Management Software
Contains	Apache Tomcat Webserver *x.x.x*
	: Common Storage Module *x.x.x*
	: Data Engine *x.x.x*
	: Hardware Application Programming Interface *x.x.x*
	: Instrumentation Service*x.x.x*
	: Instrumentation Service Integration Layer *x.x.x*
	Intel SNMP Agent *x.x.x*

Table 37. Command results (continued)

	: Inventory Collector *x.x.x*
	: OMACS *x.x.x*
	: Operating System Logging*x.x.x*
	: Oracle Java Runtime Environment *x.x.x*
	: Remote Access Controller Managed Node *x.x.x*
	: Server Administrator Common Framework *x.x.x*
	: Server Administrator Core files *x.x.x*
	: Server Administrator Instrumentation files *x.x.x*
	: Server Administrator Core files *x.x.x*
	: Server Instrumentation SNMP Module *x.x.x*
	: Server Instrumentation WMI Module *x.x.x*
	: Storage Management *x.x.x*
Operating System	
Name	: Microsoft Windows Server 2008 R2, Enterprise x64 Edition
Version	: Version 6.1 (Build 7601 : Service Pack 1) (x64) Server Full Installation
System Time	: Fri May 20 18:02:52 2XXX
System Bootup Time	: Wed May 18 18:37:58 2XXX

Server Module	

Information	
Host Name	: WIN-GSFCCED6N2D
System Location	: Please set the value
Model	: PowerEdge FM120
Asset Tag	SST,3,4,S
Service Tag	CB2DX1S
Express Service Code	26790524560
Slot Number	Slot =8
Slot Name	SLOT-02
Form Factor	1U Half Width
Node Id	CB2DX1Sc
Remote Access Information	
Remote Access Device	: iDRAC7 Express
vFlash Media	: Absent

Table 37. Command results (continued)

Processor 1	
Processor Brand	: Genuine Intel (R) CPU 4000 @ 2.41GHz
Processor Version	: Model 77
Voltage	: 1000 mV
Memory	
Total Installed Capacity	:4096 MB
Memory Available to the OS	:4096 MB
Total Maximum Capacity	:32768 MB
Memory Array Count	: 1
Memory Array 1	
Location	: System Board or Motherboard
Use	: System Memory
Installed Capacity	: 4096 MB
Maximum Capacity	: 32768 MB
Slots Available	: 24
Slots Used	: 1
ECC Type	: Multibit ECC
BIOS Information	
Manufacturer	: Dell Inc.
Version	: 0.1.10
Release Date	: 07/31/2013
Firmware Information	
Name	: iDRAC7
Version	: 1.50.50 (Build 3)
Firmware Information	
Name	: Lifecycle Controller 2
Version	: 1.3.0.518

Remote Access Controller	

Remote Access Controller Information	
Product	: iDRAC7 Express
IP Address	: 10.94.146.217
IP Subnet	: 255.255.255.0
IP Gateway	: 10.94.146.1
IPv6 Address 1	: ::

Table 37. Command results (continued)

IPv6 Address 2	: ::
IPv6 Gateway	: ::

Network Data	

Network Interface 0	
IP Address	: xx.xx.xx.xx
Subnet Mask	: xx.xx.xx.xx
Default Gateway	: xx.xx.xx.xx
MAC Address	: : xx-xx-xx-xx-xx-xx
Network Interface 1	
IP Address	: xx.xx.xx.xx
Subnet Mask	: xx.xx.xx.xx
Default Gateway	: xx.xx.xx.xx
MAC Address	: : xx-xx-xx-xx-xx-xx

Hardware Information Using Omreport System Summary Or Omreport Servermodule Summary

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

System Attributes

- Host Name
- System Location
- Life Cycle Controller

Main System Chassis Or 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 Or 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 is displayed:

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

Omreport System Version Or 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 the system. Type:

```
omreport system version
```

or

```
omreport servermodule version
```

NOTE: If iDRAC is installed, Server Administrator displays the Lifecycle Controller version. If BMC is installed, Server Administrator displays the USC version.

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

```
Version Report
---------------------
Main System Chassis
---------------------
Name        : BIOS
Version     : 0.3.5

Name        : iDRAC7
Version     : 1.00

---------------------
Software
---------------------
Name        : Microsoft Windows Server 2008 R2, Enterprise x64 edition
Version     : Version 6.1 (Build 7600) (x64) Server Full Installation

Name        : Dell Server Administrator
Version     : 7.x.x
-----------------------------------
Storage Controller Firmware
-----------------------------------
Name     : PERC H310 Mini
Version     : 20.10.1-0025
```

Omreport Preferences Commands

Use the `omreport preferences` command to view the URL details of the Server Administrator Web server, key sign algorithm, JRE, and message format.

Omreport Preferences Messages

Use the `omreport preferences messages` to view the configured alert message format.

The following table lists the available attributes of `omreport preferences messages`.

Table 38. Valid Parameters Of Omreport Preferences Messages

name=value pair	Description
attribute=format	Reports the currently configured alert message format.

Type:

```
omreport preferences messages attribute=format
```

The output that is displayed is as follows:

```
Event Message Format    : enhanced
```

Omreport preferences logging

Use the `omreport preferences logging` command to view the log details.

The following table lists the available attributes of `omreport preferences logging`.

Table 39. Valid Parameters Of Omreport Preferences Logging

name=value pair	Description
attribute=oslogfilter	Displays the settings configured for OS logging filter.
attribute=archiveesmlog	Displays the settings for Auto Archive ESM Log preference.
attribute=logallsensors	Displays the settings configured for Log All ESM Sensor events preference.

Type:

```
omreport preferences logging attribute=oslogfilter
```

The output that is displayed is as follows:

```
Log Critical           : false
Log Warning             : true
Log Informational  : true
```

Omreport preferences webserver

Use the `omreport preferences webserver` command to view the URL details, current key-sign algorithm, and the JRE details.

The following table lists the available attributes of `omreport preferences webserver`.

Table 40. Valid Parameters Of Omreport Preferences Webserver

name=value pair	Description
attribute=geturl	Reports the URL information of the web server. This command helps to access the Server Administrator GUI using a remote web server (management system).
attribute=getsignalgorithm	Reports the current key-sign algorithm.
attribute=getjre	Displays the version of the currently used JRE.
attribute=getjrelist	Displays the supported JRE versions installed in the system.
attribute=getciphers	Displays the current cipher values configured.
attribute=getsslprotocol	Displays the current SSL Protocol values set.
attribute=getport	Displays the information of the configured port value.
attribute=getipaddress	Reports the configured IP Address value.
attribute=getsessiontimeout	Displays the configured session time-out value.

Type:

```
omreport preferences webserver attribute=getjrelist
```

The output that is displayed is as follows:

```
Version: 1.7.0_05 (Bundled)
Path : C:\Program Files <x86>\Dell|SysMgt\jre

Version:1.7.0_03
Path:C:\Program Files <x86>\Java\jre7
```

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 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 specify values for warning events on fans, voltage probes, and temperature probes
- Power user and administrator privilege to set alert actions in case of a warning or failure event from intrusion, fans, voltage probes, and temperature probes

For more information on using the `omconfig` command to view and manage cost of ownership information (`assetinfo`), see Omconfig System Or Servermodule Assetinfo Editing Cost Of Ownership Values.

Often, you must use the `omreport` commands to get the information required to execute an `omconfig` command. For example, to edit the minimum temperature for a warning event on a temperature probe, you must know the index of the probe. 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.

The following table displays the system availability for the omconfig command:

Table 41. System Availability For The Omconfig Command

Command Level 1	Command Level 2	Applicable to
omconfig	servermodule	Blade systems
	mainsystem	Blade systems
	system	Rack and Tower systems
	chassis	Rack and Tower systems

Topics:

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 you can enable or disable the component or feature, but you cannot simultaneously enable and disable the component or feature.

omconfig Command Summary

The following table provides a high-level summary of the `omconfig` command. The columns titled *Command level 2* and *Command level 3* list the major arguments that are used with `omconfig`. *User privilege required* refers to the type of privilege you need to run the command, where U = User, P = Power User, and A = Administrator. *Use* is a very general statement about the actions that are performed using `omconfig`.

NOTE: Although the following table lists all possible `omconfig` commands, the commands available on the system depend on the system configuration. If you try to get help or run a command for a component not installed on the system, Server Administrator displays a message that the component or feature is not found on the system.

NOTE: When CSIOR (Collect System Inventory on Restart) is disabled, `omconfig` does not allow to configure the BIOS settings.

Table 42. 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 the version number and properties for the Server Administrator program.
		details=true	U, P, A	Displays information for all 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.
		messages	A	Displays the configured alert message format.
		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 or servermodule			
		alertaction	P, A	Determines in advance the actions 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 the 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 or disables SNMP traps.
		pedestinations	P, A	Sets IP addresses for alert destinations.
		platformevents	A	Determines the shutdown action, if any, taken for a specific platform event. Also, enables or disables platform events filter alert generation.

Table 42. omconfig Command Level 1, Level 2, and Level 3 (continued)

Command Level 1	Command Level 2	Command Level 3	User Privilege Required	Use
		recovery	P, A	Determines in advance how the system responds to a hung operating system.
		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 or mainsystem			
		biossetup	A	Configures the behavior of specific system components controlled by the BIOS.
		fans	P, A	Configures fan probe warning thresholds to the default or a specific 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 of the asset tag or chassis name.
		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, mirroring, raid, and Double Device Data Correction (DDDC) 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 to the default or a specific value. **NOTE:** You cannot change threshold values on ESM3 and PowerEdge *x8xx* systems.
		volts	P, A	Sets warning threshold values to the default or a specific value. **NOTE:** You cannot change threshold values on ESM3 and PowerEdge *x8xx* systems.
	storage			For more information, see Using The Storage Management Service.

Help With The Omconfig Command

The following table lists the usage of `omconfig` commands.

Table 43. Usage Of Omconfig Commands

Command Usage	Description
omconfig -?	To display the list of the available commands for omconfig.
omconfig <command level 2> -?	To display the help for `about`, `chassis`, `preferences`, and `system`'s level 2 commands.
omconfig chassis -?	To display the help for `omconfig chassis` command.
omconfig system -?	To display the help for `omconfig system` command.
omconfig preferences -?	To display the available commands for `omconfig preferences`, such as `cdvformat`, which is the custom delimiter format (cdv).
omconfig preferences cdvformat -?	To display the list of delimiter values for the cdv.
omconfig system <command level 3> -?	To display the list of the parameters you must use to execute a particular `omconfig system` command.
omconfig system alertaction -?	To display the list of valid parameters for `omconfig system alertaction`.
omconfig system shutdown -?	To display the list of valid parameters for `omconfig system shutdown`.
omconfig system alertaction -? | more	To display the list of valid parameters for `omconfig system alertaction` and to scroll the command output one screen at a time. Here, `| more` allows you to press the spacebar to see the next screen of the CLI help output.
omconfig system alertaction -? -outa alert.txt	To create a file that contains all the help for the `omconfig system alertaction -?` command. Here, `-outa` directs the output of the command to a file called `alert.txt` .
more alert.txt	To read the help for the `alertaction` command on Microsoft Windows, Red Hat Enterprise Linux, or SUSE Linux Enterprise Server operating systems.

Omconfig About

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

Table 44. Omconfig output

`Product name`	`: Dell OpenManage Server Administrator`
`Version`	`: 7.x.x`
`Copyright`	`: Copyright (C) Dell Inc. xxxx-xxxx. 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 having a version number of its own. The **Contains** field reports version numbers for the services and provides other useful details. The output may change depending on the configuration of the system and the version of Server Administrator.

Table 45. Output

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 Or Omconfig Mainsystem

Use the `omconfig chassis` or `omconfig mainsystem` commands to:

- Set to default or assign specific values for fan, voltage, and temperature probes
- Configure BIOS behavior during system start up
- Clear memory error counts
- Enable or disable power button control features if the system configuration permits

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

Omconfig Chassis Biossetup Or 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 the system.

CAUTION: Changing certain BIOS setup options may disable the system or require you to reinstall the operating system.

NOTE: Reboot the system for the BIOS setup options to take effect.

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

NOTE: When CSIOR (Collect System Inventory on Restart) is disabled, you cannot configure the BIOS settings using `omconfig` command.

BIOS setup settings on systems prior to PowerEdge YX2X systems

The following table displays the name=value pairs that you can use with `omconfig chassis biossetup` or `omconfig mainsystem biossetup` command on systems prior to PowerEdge YX2X systems.

Table 46. BIOS Setup Settings on systems prior to PowerEdge YX2X systems

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 the previous state. • **on**: System is turned on.
	delay=random | immediate | timedelay <*value*>	• **random**: System is turned on with random delay. • **immediate**: System returns to previous state immediately. • **timedelay <*value*>**: System is turned on based on the 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 checks each device. **NOTE:** On Linux systems, user or user groups upgraded to administrator or 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.
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 or user groups upgraded to administrator or 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 or user groups upgraded to

Table 46. BIOS Setup Settings on systems prior to PowerEdge YX2X systems (continued)

name=value pair 1 attribute=	name=value pair 2 setting=	Description
		administrator or 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.
attribute=conredirect	setting=enabled | disabled	• **enabled**: Redirects the BIOS screen output over serial port 1. Keyboard and text output are redirected over serial port 2. • **disabled**: Turns off the BIOS console redirection.
attribute=cpucle	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.
attribute=cpuxdsupport	setting=enabled | disabled	• **enabled**: Enables Execute Disable (XD) support on the 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**: The diskette drive is available in read-only format only. Makes the diskette drive read-only.

Table 46. BIOS Setup Settings on systems prior to PowerEdge YX2X systems (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 the first NIC and none (no PXE or iSCSI) on the second NIC. • **nic2pxe**: Enables none (no PXE or iSCSI) on first NIC and PXE on the second NIC. • **isciboth**: Enables iSCSI on both the NICs. • **nic1isci**: Enables iSCSI on the first NIC and none (no PXE or iSCSI) on the second NIC. • **nic2isci**: Enables none (no PXE or iSCSI) on the first NIC and iSCSI on the second NIC. • **nic1pxenic2isci**: Enables PXE on the first NIC and iSCSI on second NIC. • **nic1iscinic2pxe**: Enables iSCSI on the first NIC and PXE on second NIC. The following options are deprecated: • **onpxeboth**: Enables PXE on both the 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 the embedded hypervisor. • **disabled**: Disables the embedded hypervisor.
attribute=embvideoctrl	setting=enabled | disabled	• **enabled**: Enables the embedded video controller as the primary video device. • **disabled**: Disables the embedded video controller as 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 the external serial connector to COM 1. • **com2**: Maps the external serial connector to COM 2. • **rad**: Maps the external serial connector to the remote access device.

Table 46. BIOS Setup Settings on systems prior to PowerEdge YX2X systems (continued)

name=value pair 1 attribute=	name=value pair 2 setting=	Description
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.
attribute=ide	setting=on | off force=true	• **on**: Enables IDE. • **off**: Disables IDE. • **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=mouse	setting=on | off	• **on**: Enables the mouse. • **off**: Disables the mouse.
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).

Table 46. BIOS Setup Settings on systems prior to PowerEdge YX2X systems (continued)

name=value pair 1 attribute=	name=value pair 2 setting=	Description
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).
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).
attribute=numlock	setting=on | off	• **on**: Uses the keypad as number keys. • **off**: Uses the keypad as arrow keys.
attribute=NodeInterleave	setting=enabled | disabled	• **enabled**: Enables Node Interleaving and disables Non-Uniform Memory Access.

Table 46. BIOS Setup Settings on systems prior to PowerEdge YX2X systems (continued)

name=value pair 1 attribute=	name=value pair 2 setting=	Description
NOTE: Use `NodeInterleave` instead of `numa` as `numa` will be deprecated in future releases.		• **disabled**: Disables Node Interleaving and enables Non-Uniform Memory Access.
attribute=ppaddress	setting=off | lpt1 | lpt2 | lpt3	• **off**: Disables the parallel port address. • **lpt1**: Locates the device on LPT1. • **lpt2**: Locates the device on LPT2. • **lpt3**: Locates the device on LPT3.
attribute=ppmode	setting=at | ps2 | ecp | epp	• **at**: Sets the parallel port mode to AT. • **ps2**: Sets the parallel port mode to PS/2. • **ecp**: Sets the parallel port mode to ECP (extended capabilities port). • **epp**: Sets the parallel port mode to EPP (enhanced parallel port).
attribute=primaryscsi	setting=on | off force=true	**CAUTION: If you modify the setting for primary scsi, romb, romba, or rombb, the system becomes inoperable until you reinstall the operating system.** • **on**: Enables this device. • **off**: Disables this device. • **force=true**: Verification of setting change.
attribute=romb	setting=raid | off | scsi force=true	• **raid**: Instructs the BIOS to detect RAID-on-motherboard as a RAID device. • **off**: Disables RAID-on-motherboard during system boot. • **scsi**: Instructs the BIOS to detect the RAID-on-motherboard 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 the RAID-on-motherboard 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 the RAID-on-motherboard device as a SCSI device. • **force=true**: Verification of setting change.

Table 46. BIOS Setup Settings on systems prior to PowerEdge YX2X systems (continued)

name=value pair 1 attribute=	name=value pair 2 setting=	Description
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 enables the SATA port.
attribute=secondaryscsi	setting=on | off	• **on**: Enables secondary SCSI. • **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 through COM1. • **com2**: Enables serial communication setting with console redirection through COM2. • **onwithconsole**: Enables serial communication with console redirection through COM1 and COM2. **NOTE:** The setting **onwithconsole** is supported only on Dell blade systems.
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.

Table 46. BIOS Setup Settings on systems prior to PowerEdge YX2X systems (continued)

name=value pair 1 attribute=	name=value pair 2 setting=	Description
		NOTE: This command is applicable only on selected *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 the system is operating below the thermal, power, or current limits. • **enabled**: Enables CPU Turbo Mode. • **disabled**: Disables CPU Turbo Mode.
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 the 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 system boot, with BIOS support. • **disabled**: Disables the USB port(s) during system boot. **NOTE:** Depending on the 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 from going into a deep sleep state when the system is not utilized.

BIOS setup settings

The following table lists the BIOS setup attributes supported on PowerEdge systems. The attributes are grouped based on the hardware configuration. The possible attributes may vary in a specific group. The `omconfig chassis biossetup` command does not display the read-only attributes.

NOTE: If you have configured the setup password, then, always set the same password when you configure any BIOS settings.

Table 47. BIOS Setup Settings on PowerEdge systems

Group	name=value pair 1 attribute=	name=value pair 2 setting=
BIOS Option Settings	attribute=BootSeq	sequence=aliasname1, aliasname2,..... aliasnameN
	attribute=HddSeq	sequence=aliasname1, aliasname2,..... aliasnameN
Boot Settings	attribute=BootMode	setting=Bios | Uefi
	attribute=BootSeqRetry	setting=Enabled | Disabled
	attribute=HddFailover **NOTE:** The option is supported only on YX3X and later systems.	setting=Enabled | Disabled
	attribute=SetBootOrderFqdd1–SetBootOrderFqdd16 **NOTE:** The option is supported only on YX3X and later systems.	setting=<*string*>
	attribute=SetLegacyHddOrder Fqdd1–SetLegacyHddOrderFqdd16 **NOTE:** The option is supported only on YX3X and later systems.	setting=<*string*>
Integrated Devices	attribute=EmbVideo	setting=Enabled | Disabled
	attribute=IntegratedNetwork1	setting=Enabled | DisabledOs
	attribute=IntegratedNetwork2	setting=Enabled | DisabledOs
	attribute=IntegratedRaid	setting=Enabled | Disabled
	attribute=IntegratedSas	setting=Enabled | Disabled
	attribute=InternalSdCard	setting=On | Off
	attribute=InternalSdCardRedundancy	setting=Mirror | Disabled
	attribute=InternalUsb	setting=On | Off
	attribute=IoatEngine	setting=Enabled | Disabled
	attribute=OsWatchdogTimer	setting=Enabled | Disabled
	attribute=SriovGlobalEnable	setting=Enabled | Disabled
	attribute=UsbPorts	setting=AllOn | OnlyBackPortsOn | AllOff
	attribute=Usb3Setting **NOTE:** The option is supported only on YX3X and later systems.	setting=Auto | Enabled | Disabled
	attribute=InternalSdCardPrimaryCard **NOTE:** The option is supported only on YX3X and later systems.	setting=SdCard1 | SdCard2

Table 47. BIOS Setup Settings on PowerEdge systems (continued)

Group	name=value pair 1 attribute=	name=value pair 2 setting=
	attribute=CurrentEmbVideoState **NOTE:** The option is supported only on YX3X and later systems.	setting=Enabled | Disabled
Memory Settings	attribute=MemOpMode	setting=OptimizerMode | SpareMode | MirrorMode | AdvEccMode | SpareWithAdvEccMode
	attribute=MemTest	setting=Enabled | Disabled
	attribute=NodeInterleave	setting=Enabled | Disabled
	attribute=SysMemSize	setting=<*string*>
	attribute=SysMemSpeed	setting=<*string*>
	attribute=SysMemType	setting=<*string*>
	attribute=SysMemVolt	setting=<*string*>
	attribute=VideoMem	setting=<*string*>
	attribute=ClusterOnDie **NOTE:** The option is supported only on YX3X and later systems.	setting=Enabled | Disabled
Miscellaneous Settings	attribute=AssetTag	setting=<*string*>
	attribute=NumLock	setting=On | Off
	attribute=ErrPrompt	setting=Enabled | Disabled
	attribute=SysMgmtNVByte1	setting=<*string*>
	attribute=SysMgmtNVByte1	setting=<*string*>
	attribute=CorrEccSmi	setting=Enabled | Disabled
	attribute=InSystemCharacterization **NOTE:** The option is supported only on YX3X and later systems.	setting=FastBoot | OptimizedBoot | Disabled
	attribute=ReportKbdErr	setting=Report | NoReport
	attribute=SystemUefiShell	setting=Enabled | Disabled
	attribute=ForceInt10 **NOTE:** The option is supported only on YX3X and later systems.	setting=Enabled | Disabled
	attribute=PowerCycleRequest	setting=None | VirtualAC
Network Settings **NOTE:** The option is supported only on YX3X and later systems.	attribute=PxeDev1EnDis - PxeDev4EnDis	setting=Enabled | Disabled
	attribute=PxeDev1Interface - PxeDev4Interface	setting=Enabled | Disabled
	attribute=PxeDev1Protocol - PxeDev4Protocol	setting=IPv4 | IPv6
	attribute=PxeDev1VlanEnDis - PxeDev4VlanEnDis	setting=Enabled | Disabled
	attribute=PxeDev1VlanId - PxeDev4VlanId	setting=<*integer*>

Table 47. BIOS Setup Settings on PowerEdge systems (continued)

Group	name=value pair 1 attribute=	name=value pair 2 setting=
	attribute=PxeDev1VlanPriority - PxeDev4VlanPriority **NOTE:** Configuration of virtual LAN (VLAN) interfaces are not displayed on Server Administrator Network Settings.	setting=<*integer*>
One-Time Boot **NOTE:** The option is not supported on Dell PowerEdge YX3X and later systems.	attribute=OneTimeBootMode	setting=Disabled | OneTimeBootSeq | OneTimeHddSeq | OneTimeUefiBootSeq | OneTimeCustomBootSeqStr | OneTimeCustomHddSeqStr | OneTimeCustomUefiBootSeqStr
	attribute=OneTimeBootSeqDev	sequence=aliasname1, aliasname2,..... aliasnameN
	attribute=OneTimeHddSeqDev	sequence=aliasname1, aliasname2,..... aliasnameN
	attribute=OneTimeUefiBootSeqDev	sequence=aliasname1, aliasname2,..... aliasnameN
Processor Settings	attribute=ControlledTurbo	setting=Enabled | Disabled | Custom
	attribute=DataReuse	setting=Enabled | Disabled
	attribute=DcuIpPrefetcher	setting=Enabled | Disabled
	attribute=DcuStreamerPrefetcher	setting=Enabled | Disabled
	attribute=LogicalProc	setting=Enabled | Disabled
	attribute=Proc1Brand	setting=<*string*>
	attribute=Proc1Id	setting=<*string*>
	attribute=Proc1L2Cache	setting=<*string*>
	attribute=Proc1L3Cache	setting=<*string*>
	attribute=Proc1NumCores	setting=<*integer*>
	attribute=Proc2Brand	setting=<*string*>
	attribute=Proc2Id	setting=<*string*>
	attribute=Proc2L2Cache	setting=<*string*>
	attribute=Proc2L3Cache	setting=<*string*>
	attribute=Proc2NumCores	setting=<*integer*>
	attribute=Proc64bit	setting=<*string*>
	attribute=ProcAdjCacheLine	setting=Enabled | Disabled
	attribute=ProcBusSpeed	setting=<*string*>
	attribute=ProcCores	setting=Single | All | Dual | Quad | 1 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16
	attribute=ProcCoreSpeed	setting=<*string*>
	attribute=ProcExecuteDisable	setting=Enabled | Disabled
	attribute=ProcHwPrefetcher	setting=Enabled | Disabled
	attribute=ProcVirtualization	setting=Enabled | Disabled
	attribute=QpiBandwidthPriority	setting=InputOutput | Compute

Table 47. BIOS Setup Settings on PowerEdge systems (continued)

Group	name=value pair 1 attribute=	name=value pair 2 setting=
	attribute=QpiSpeed	setting=MaxDataRate | 8GTps | 7GTps | 6GTps
	attribute=RtidSetting	setting=Enabled | Disabled
	attribute=Proc1ControlledTurbo – Proc4ControlledTurbo **NOTE:** The option is supported only on YX3X and later systems.	setting=Disabled | ControlledTurboLimit | ControlledTurboLimitMinus1 | ControlledTurboLimitMinus2 | ControlledTurboLimitMinus3
	attribute=ProcConfigTdp **NOTE:** The option is supported only on YX3X and later systems.	setting=Nominal | Level1 | Level2
	attribute=ProcATS	setting=Enabled | Disabled **NOTE:** The option is read-only if `ProcVirtualization` is set to `Disabled`.
	attribute=ProcX2Apic **NOTE:** The option is supported only on YX3X and later systems.	setting=Enabled | Disabled **NOTE:** The option is read-only if `ProcVirtualization` is set to `Disabled`.
SATA Settings	attribute=EmbSata	setting=Off | AtaMode | RaidMode | AhciMode
	attribute=eSataPort1	setting=Off | Auto
	attribute=eSataPort1Capacity	setting=<*string*>
	attribute=eSataPort1DriveType	setting=<*string*>
	attribute=eSataPort1Model	setting=<*string*>
	attribute=SataPortA - SataPortJ	setting=Off | Auto
	attribute=SataPortACapacity - SataPortJCapacity	setting=<*string*>
	attribute=SataPortADriveType - SataPortJDriveType	setting=<*string*>
	attribute=SataPortAModel - SataPortJModel	setting=<*string*>
	attribute=SecurityFreezeLock	setting=Enabled | Disabled
	attribute=WriteCache	setting=Enabled | Disabled
Serial Communication	attribute=ConTermType	setting=Vt100Vt220 | Ansi
	attribute=ExtSerialConnector	setting=Serial1 | Serial2 | RemoteAccDevice
	attribute=FailSafeBaud	setting=115200 | 57600 | 19200 | 9600
	attribute=RedirAfterBoot	setting=Enabled | Disabled
	attribute=SerialComm	setting=OnNoConRedir | OnConRedirCom1 | OnConRedirCom2 | Off
	attribute=SerialPortAddress	setting=Serial1Com1Serial2Com2 | Serial1Com2Serial2Com1 | Com1 | Com2

Table 47. BIOS Setup Settings on PowerEdge systems (continued)

Group	name=value pair 1 attribute=	name=value pair 2 setting=
Slot Disablement	attribute=Slot*n*	setting=Enabled | Disabled | BootDriverDisabled
System Information	attribute=SysMfrContactInfo	setting=<*string*>
	attribute=SystemBiosVersion	setting=<*string*>
	attribute=SystemManufacturer	setting=<*string*>
	attribute=SystemModelName	setting=<*string*>
	attribute=SystemServiceTag	setting=<*string*>
	attribute=SystemMeVersion **NOTE:** The option is supported only on YX3X and later systems.	setting=<*string*>
	attribute=UefiComplianceVersion **NOTE:** The option is supported only on YX3X and later systems.	setting=<*string*>
	attribute=SystemCpldVersion	setting=<*string*>
System Profile Settings	attribute=MemFrequency	setting=MaxPerf |1866MHz | 1600MHz | 1333MHz |1067MHz | 800MHz | MaxReliability
	attribute=MemPatrolScrub	setting=Standard | Extended | Disabled
	attribute=MemRefreshRate	setting=1x | 2x
	attribute=MemVolt	setting=AutoVolt | Volt15V | Volt135V **NOTE:** Volt15V represents 1.5 Volt and Volt135V represents 1.35 Volt
	attribute=ProcC1E	setting=Enabled | Disabled
	attribute=ProcCStates	setting=Enabled | Disabled
	attribute=ProcPwrPerf	setting=MaxPerf | MinPwr | SysDbpm | OsDbpm
	attribute=ProcTurboMode	setting=Enabled | Disabled
	attribute=SysProfile	setting=PerfPerWattOptimizedOs | PerfPerWattOptimizedDapc | PerfOptimized | Custom | DenseCfgOptimized
	attribute=EnergyEfficientTurbo **NOTE:** The option is supported only on YX3X and later systems.	setting=Enabled | Disabled
	attribute=EnergyPerformanceBias **NOTE:** The option is supported only on YX3X and later systems.	setting=MaxPower | BalancedPerformance | BalancedEfficiency | LowPower
	attribute=UncoreFrequency **NOTE:** The option is supported only on YX3X and later systems.	setting=DynamicUFS | MaxUFS | MinUFS
	attribute=ProcNTurboCoreNum (N= 0-3) , where the value of N is 0–3.	setting=All | 1 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18

Table 47. BIOS Setup Settings on PowerEdge systems (continued)

Group	name=value pair 1 attribute=	name=value pair 2 setting=
	NOTE: The option is supported only on YX3X and later systems.	
	attribute=MonitorMwait	setting=Enabled | Disabled
	attribute=CollaborativeCpuPerfCtrl	setting=Enabled | Disabled
System Security	attribute=AcPwrRcvry	setting=On | Off | Last
	attribute=AcPwrRcvryDelay	setting=Immediate | User | Random
	attribute=AcPwrRcvryUserDelay	setting=<*integer*>
	attribute=AesNi	setting=Enabled | Disabled
	attribute=IntelTxt	setting=On | Off
	attribute=NmiButton	setting=Enabled | Disabled
	attribute=PasswordStatus	setting=Locked | Unlocked
	attribute=PwrButton	setting=Enabled | Disabled
	attribute=SetupPassword	setting=<*string*>
	attribute=SysPassword	setting=<*string*>
	attribute=TpmActivation **NOTE:** The option is not supported on Dell PowerEdge YX3X and later systems.	setting=NoChange | Activate | Deactivate
	attribute=TpmClear **NOTE:** The option is not supported on Dell PowerEdge YX3X and later systems.	**CAUTION: Clearing the TPM will cause loss of all keys in the TPM. This could affect booting of the operating system.** setting=Yes | No
	attribute=TpmSecurity	setting=Off | OnPbm | OnNoPbm
	attribute=TpmInfo **NOTE:** The option is supported only on YX3X and later systems.	setting=<*string*>
	attribute=TpmCommand **NOTE:** The option is supported only on YX3X and later systems.	setting=None | Activate | Deactivate | Clear
	attribute=TpmStatus	setting=<*string*>
	attribute=TcmActivation **NOTE:** The option is not supported on Dell PowerEdge YX3X and later systems.	setting=NoChange | Activate | Deactivate
	attribute=TcmClear **NOTE:** The option is not supported on Dell PowerEdge YX3X and later systems.	**CAUTION: Clearing the TCM will cause loss of all keys in the TCM. This could affect booting of the operating system.** setting=Yes | No
	attribute=TcmSecurity	setting=Off | OnPbm | OnNoPbm

Table 47. BIOS Setup Settings on PowerEdge systems (continued)

Group	name=value pair 1 attribute=	name=value pair 2 setting=
	NOTE: The option is not supported on Dell PowerEdge YX3X and later systems.	
	attribute=SecureBoot **NOTE:** The option is supported only on YX3X and later systems.	setting=Enabled | Disabled
	attribute=SecureBootPolicy **NOTE:** The option is supported only on YX3X and later systems.	setting=Enabled | Disabled
	attribute=UefiVariableAccess	setting=Standard | Controlled
UEFI Boot Settings	attribute=UefiBootSeq	sequence=aliasname1, aliasname2,..... aliasnameN

Omconfig Chassis Currents Or Omconfig Mainsystem Currents

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

Omconfig Chassis Fans Or 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. The system manufacturer sets the minimum and maximum failure thresholds.

Valid Parameters For Fan Warning Thresholds

The following table shows the valid parameters for setting fan warning thresholds:

Table 48. omconfig chassis fans or omconfig chassis fans

name=value pair	Description
index= <*n*>	Number of the probe or probe index (must specify).
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.

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 the 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 is displayed:

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

Omconfig chassis frontpanel or 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 the system.

The following table displays the valid parameters for the command:

Table 49. Valid Parameters Of Omconfig Chassis Frontpanel Or 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.

Table 49. Valid Parameters Of Omconfig Chassis Frontpanel Or Omconfig Mainsystem Frontpanel (continued)

name=value pair 1	name=value pair 2	Description
		• **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.
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 Or Omconfig Mainsystem Info

Use the `omconfig chassis info` or `omconfig mainsystem info` command to enter an asset tag name and a chassis name for the system. For a blade systems, enter asset tag names for modular components as well. The following table displays the valid parameters for the command:

Table 50. Valid Parameters Of Omconfig Chassis Info Or Omconfig Mainsystem Info

name=value pair	Description
index=<*n*>	Number of the chassis whose asset tag or name you are setting.

Table 50. Valid Parameters Of Omconfig Chassis Info Or Omconfig Mainsystem Info (continued)

name=value pair	Description
tag=<*text*>	Asset tag in the form of alphanumeric text. Letters or numbers should not exceed 10 characters. **NOTE:** The parameter is not supported on YX3X and later systems. For setting the asset tag, use **omconfig chassis biossetup attribute=assetag seting=<value>**.
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:

```
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 following example, 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 Or 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. The following table displays the valid parameters for the command.

Table 51. Valid Parameters Of Omconfig Chassis Leds Or 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).

Table 51. Valid Parameters Of Omconfig Chassis Leds Or Omconfig Mainsystem Leds (continued)

name=value pair 1	name=value pair 2	Description
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 Or Omconfig Mainsystem Memorymode

Use the `omconfig chassis memorymode` or `omconfig mainsystem memorymode` command to specify the redundancy mode to use for the 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 memory module the system is using begins to encounter errors. To enable redundancy, choose among spare, mirror, raid, and DDDC.

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.

The DDDC mode enables double device data correction. This ensures data availability after hard failure of x4 DRAM.

NOTE: This command is applicable only on systems prior to PowerEdge YX2X systems. On PowerEdge YX2X systems, `memorymode` is grouped under **Memory Settings** of the BIOS setup group. For more information, see BIOS Setup Groups on PowerEdge YX2X Systems.

To configure the attribute on systems prior to PowerEdge YX2X, see the following table. The table displays the valid parameters for the command.

Table 52. Valid Parameters Of Omconfig Chassis Memorymode Or 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 | dddc	**spare**: Disables the memory module that has a correctable memory event and copies the failing module's data to a spare bank. **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 reboot. **disabled**: Indicates that the system is not to use other available memory modules if uncorrectable memory events are detected. **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. **dddc**: The dddc mode enables double device data correction. This ensures data availability after hard failure of x4 DRAM.

Table 52. Valid Parameters Of Omconfig Chassis Memorymode Or Omconfig Mainsystem Memorymode (continued)

name=value pair 1	Description
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 are not teamed by the controllers is not reported to the operating system.

Omconfig chassis pwrmanagement or omconfig mainsystem pwrmanagement

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

NOTE: This command is valid only on systems prior to PowerEdge YX2X systems.

The following table displays the valid parameters for the command:

Table 53. Valid Parameters Of Omconfig Chassis Pwrmanagement Or Omconfig Mainsystem Pwrmanagement

name=value pair 1	name=value pair 2	Description
config=budget	cap=<*value*>	Sets the threshold value for power budget. **NOTE:** From PowerEdge YX2X system onwards, power budget requires license to configure power cap. If the appropriate license is not installed or has expired, the system displays an error message. For more information, see *Dell License Manager* at **dell.com/support/manuals**. **NOTE:** Power budget requires license to configure power cap. If the appropriate license is not installed or has expired, the system displays an error message. For more information, see *Dell License Manager* at **dell.com/support/manuals**.
	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.

Table 53. Valid Parameters Of Omconfig Chassis Pwrmanagement Or Omconfig Mainsystem Pwrmanagement (continued)

name=value pair 1	name=value pair 2	Description
		percent: Configure the unit in percentage.
config=profile **NOTE:** This option is supported on systems prior to PowerEdge YX2X systems.	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.
	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 fanmode to minimum power utilization. **max**: Sets the fanmode to maximum power utilization. **NOTE:** These options are applicable only when a custom profile is selected.

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

Omconfig Chassis Pwrmonitoring Or Omconfig Mainsystem Pwrmonitoring

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

The following table displays the valid parameters for the command:

Table 54. Valid Parameters Of Omconfig Chassis Pwrmonitoring Or Omconfig Mainsystem Pwrmonitoring

name=value pair 1	name=value pair 2	Description
index=<*n*>	NA	Number of the probe or probe index (must specify).
config=probe	warnthresh=settodefault	Sets the 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: Power monitoring requires license to configure the power budget information. If the appropriate license is not installed or has expired, the system displays an error message. For more information, see *Dell License Manager* at **dell.com/openmanagemanuals**.

Default warning thresholds

NOTE: Sensor managing capabilities vary across systems.

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. Configure the values to display 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 is displayed:

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

Omconfig chassis remoteaccess or 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: 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. The following table displays the valid parameters:

Table 55. Valid Parameters Of Omconfig Chassis Remoteaccess Or Omconfig Mainsystem Remoteaccess

name=value pair 1 config=	name=value pair 2	Description
config=additional	ipv4=enable | disable	**enable**: IPv4 stack to load on iDRAC. **disable**: IPv4 stack to flush on iDRAC.
	ipv6=enable | disable	**enable**: Enables IPv6 stack to load on iDRAC. **disable**: Disables IPv6 stack to unload on iDRAC. **NOTE:** This option requires license to enable or disable ipv6. If the appropriate license is not installed or has expired, the system displays an error message. For more information, see *Dell License Manager* at **dell.com/openmanagemanuals**.
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.
	enableipmi= true | false	**true**: Enables IPMI over LAN. **false**: Disables IPMI over LAN.

Table 55. Valid Parameters Of Omconfig Chassis Remoteaccess Or Omconfig Mainsystem Remoteaccess (continued)

name=value pair 1 config=	name=value pair 2	Description
	enablenic=true | false	**true**: Enables DRAC NIC. **false**: Disables DRAC NIC
	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 11G systems. From PowerEdge YX2X systems onwards, `primarynw` and `failovernw` replaces `nicselection`.
	primarynw=dedicated | lom1 | lom2 | lom3 | lom4	**dedicated**: Configures dedicated port as primary network for remote access. **NOTE:** This option requires license to configure `primarynw` as `dedicated`. If the appropriate license is not installed or has expired, the system displays an error message. For more information, see *Dell License Manager* at **dell.com/openmanagemanuals**. **lom 1**: Configures lom1 port as the primary network for remote access. **lom 2**: Configures lom2 port as the primary network for remote access. **lom 3**: Configures lom3 port as the primary network for remote access. **lom 4**: Configures lom4 port as the primary network for remote access. **NOTE:** The `primarynw` option is supported from PowerEdge YX2X systems onward. If the `primarynw` is set to `dedicated`, then set `failovernw` to `none`. **NOTE:** If the `primarynw` is set to `dedicated`, then set `failovernw` to `none`.
	failovernw=none | lom1 | lom2 | lom3 | lom4 | all	**none**: Configures the failover network to none. **lom 1**: Configures the failover network to lom 1. **lom 2**: Configures the failover network to lom 2. **lom 3**: Configures the failover network to lom 3. **lom 4**: Configures the failover network to lom 4. all: Configures the failover network to all loms. **NOTE:** The `failovernw` option is supported on PowerEdge YX2X systems onward. Configure both `primarynw` and `failovernw` to set the

Table 55. Valid Parameters Of Omconfig Chassis Remoteaccess Or Omconfig Mainsystem Remoteaccess (continued)

name=value pair 1 config=	name=value pair 2	Description
		`nicselection`. The `primarynw` and `failovernw` options cannot have the same value. **NOTE:** Configure both `primarynw` and `failovernw` to set the `nicselection`. The `primarynw` and `failovernw` options cannot have the same value. **NOTE:** `Failovernw` requires license to configure the ports. If the appropriate license is not installed or has expired, the system displays an error message. For more information, see *Dell License Manager* at **dell.com/openmanagemanuals**.
	ipaddress=IP	Sets the IP address if you have selected static as the IP address source for the BMC LAN interface.
	subnet=Subnet	Sets a subnet mask if you have selected static as the IP address source for the BMC LAN interface.
	gateway=Gateway	Sets a gateway address if you have selected static as the IP address source for the BMC LAN interface.
	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:** All commands may not be supported on the system.
	ipaddressv6=<*IPv6 address*> prefixlength= length	Validates the IPv6 address for configuration.
	gatewayv6=<*value*>	Validates the IPv6 gateway.
	ipsourcev6=static | auto	**static**: IPv6 address source is set to static. **auto**: IPv6 address source is set to auto.
	altdnsserverv6	Validates the address of the alternate DNS server for configuration.
	dnssourcev6=static | auto	**static**: DNS source is set to static. **auto**: DNS source is set to auto.
	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 55. Valid Parameters Of Omconfig Chassis Remoteaccess Or 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 is accepted on a LAN channel, to Administrator. **operator**: Sets the maximum privilege level that is accepted on a LAN channel, to Operator. **user**: Sets the maximum privilege level that is accepted on a LAN channel, to User.
	encryptkey=text confirmencryptkey=text	**text**: Text used for encryption and confirmation of encryption.
	prefdnsserverv6=<*value*>	Validates the preferred DNS server for configuration.
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.
	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.
	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:** All commands may not be supported on the system.
	privilegelevel=administrator | operator | user	**administrator**: Sets the maximum privilege level that are accepted on a serial connection, to Administrator. **operator**: Sets the maximum privilege level that are accepted on a serial connection, to Operator. **user**: Sets the maximum privilege level that are accepted on a serial connection, to User.

Table 55. Valid Parameters Of Omconfig Chassis Remoteaccess Or 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.
	privilegelevel=administrator | operator | user	**administrator**: Sets the maximum privilege level that are accepted on a serial over LAN channel, to Administrator. **operator**: Sets the maximum privilege level that are accepted on a serial over LAN channel, to Operator. **user**: Sets the maximum privilege level that are accepted on a serial over LAN channel, to User.
config=settodefault		Takes the default configuration settings.
config=terminalmode	deletecontrol=outputdel | outputbkspspbksp	**utputdel**: 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.
	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.

Table 55. Valid Parameters Of Omconfig Chassis Remoteaccess Or Omconfig Mainsystem Remoteaccess (continued)

name=value pair 1 config=	name=value pair 2	Description
		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 the user. **enable=false**: Disables the user.
	id=number 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.
	id=number name=text	**id=number**: ID (in numeric format) of the user being configured. **name=text**: Name of the user.
	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.
	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.
	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.

Table 55. Valid Parameters Of Omconfig Chassis Remoteaccess Or Omconfig Mainsystem Remoteaccess (continued)

name=value pair 1 config=	name=value pair 2	Description
		dracusergroup=guest: Enables the Guest user privileges. **dracusergroup=custom**: Enables the Custom User privileges. **NOTE:** For more information on **dracusergroup=custom**, see Usage of Dracusergroup=custom. **dracusergroup=none**: Does not enable user privileges.
	id=user id extipmiusergroup=admin | operator | readonly | custom | none	**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:** It is recommended that you use the **operator** and **readonly** options for systems with iDRAC Enterprise. For more information, see Usage of Extipmiusergroup=custom. **extipmiusergroup=none**: Does not enable user privileges.

Usage Of Dracusergroup

The following table displays the usage of `dracusergroup=custom`.

Table 56. Valid Parameters of omconfig chassis remoteaccess config=user id=<*user id*> dracusergroup=custom or 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	id=user id dracusergroup=custom	logindrac=true | false	**true or false**: Enables or disables logging into DRAC.
		configuredrac=true | false	**true or false**: Enables or disables configuration of DRAC.
		configure users=true | false	**true or false**: Enables or disables configuration of users.
		clearlogs=true | false	**true or false**: Enables or disables log clearance.

Table 56. Valid Parameters of omconfig chassis remoteaccess config=user id=<*user id*> dracusergroup=custom or omconfig mainsystem remoteaccess config=user id=<*user id*> dracusergroup=custom (continued)

name=value pair 1	name=value pair 2	name=value pair 3	Description
		executeservercommands=true | false	**true or false**: Enables or disables execution of server commands.
		accessconsoleredir=true | false	**true or false**: Enables or disables access to console redirection.
		accessvirtualmedia=true | false	**true or false**: Enables or disables access to virtual media.
		testalerts=true | false	**true or false**: Enables or disables test alerts.

Usage of Extipmiusergroup

The following table displays the usage of extipmiusergroup=custom:

Table 57. Usage Of extipmiusergroup

name=value pair 1	name=value pair 2	name=value pair 3	Description
config=user	id=user id extipmiusergroup=custom **NOTE:** `extipmiusergroup` user group is available only on the Dell 10G blade systems. id=user id	loginidrac=true | false	**true or false**: Enables or disables logging into iDRAC.
		configureidrac=true | false	**true or false**: Enables or disables configuration of iDRAC.

Omconfig Chassis Temps Or 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. The 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

The following table displays the valid parameters for setting temperature warning thresholds:

Table 58. Valid Parameters For Omconfig Chassis Temps Or Omconfig Mainsystem Temps

name=value pair	Description
index=<*n*>	Number of the probe or probe index (specify).

Table 58. Valid Parameters For Omconfig Chassis Temps Or Omconfig Mainsystem Temps (continued)

name=value pair	Description
warnthresh=default	Sets the minimum and maximum warning threshold values to default.
minwarnthresh=<*n*>	Sets the minimum warning threshold values (one decimal place).
maxwarnthresh=<*n*>	Sets the maximum warning threshold values (one decimal place).

Setting Minimum And Maximum Warning Threshold Values

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

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 is displayed:

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

Omconfig Chassis Volts Or 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. The system manufacturer sets the minimum and maximum values for the failure thresholds.

Valid parameters for voltage warning thresholds

The following table displays the valid parameters for setting voltage warning threshold values.

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

Table 59. Valid Parameters Of Omconfig Chassis Volts Or Omconfig Mainsystem Volts

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

Table 59. Valid Parameters Of Omconfig Chassis Volts Or Omconfig Mainsystem Volts (continued)

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

Specify A Value For Minimum And Maximum Warning Thresholds

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 is displayed:

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

Omconfig Preferences

Use the `omconfig preferences` command to set system preferences. Use the command line to specify the user levels to access Server Administrator and to configure the Active Directory service.

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>-<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 is "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.

The following table displays the valid parameters for the command:

Table 60. Valid Parameters Of Omconfig Preferences Dirservice

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 Messages

Use the `omconfig preferences messages` command to select the format of alert messages. The default format is `traditional`, which is the legacy format.

The following table lists the parameters you can use with this command. For example, to set the message format to traditional use the following command:

Table 61. Valid Parameters Of Configuring Preferences Messages

name=value pair 1	name=value pair 2	Description
attribute=format	setting=traditional | enhanced	**traditional**: Sets the alert message to traditional format. **enhanced**: Sets the alert message to Enhanced Event Messaging format. This is similar to the format available in iDRAC7.

```
omconfig preferences messages attribute=format setting=traditional
```

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. The following table displays the valid parameters for the command:

Table 62. 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 Logging

Use the omconfig preferences logging command for filtering the OS logs using the attributes.

Table 63. Valid Parameters Of Omconfig Preferences Logging

name=value pair 1	name=value pair 2	Description
attribute=oslogfilter	logcrit=true|false logwarn=true|false loginfo=true|false	Specify at least one of the three attributes (critical, warning or informational), else an error message is displayed. A command log entry is created after running the omconfig command. The OS logging settings persist on Server Administrator restart and upgrade. `omconfig preferences logging attribute=oslogfilter logcrit=<true|false> logwarn=<true|false> loginfo=<true|false>` **NOTE:** The OS logging filter command is applicable when the OS logging filter component is installed.
attribute=archiveesmlog	setting=Enable|Disable	Enabling the command allows you to create an automatic backup of ESM Logs. After the backup is created, ESM logs of the Server Administrator and the SEL entries of iDRAC/BMC are cleared. The process is repeated whenever the logs are full. The backup files are: Windows: <Install_root>\omsa\log \omsellog.xml Linux and ESXi: <Install_root>/var/log/ openmanage/omsellog.xml **NOTE:** This command is applicable only on YX0X and YX1X generation of PowerEdge servers. On Dell's YX2X generation of PowerEdge servers and later, iDRAC provides capability of automatic clear of log entries and file backup. Only latest version of the backup XML file is available in the mentioned locations.
attribute=logallsensors	setting=Enable|Disable	Enabling the command allows you to log all unmonitored ESM sensor events in to Alert log, OS log, and generates the SNMP traps.
attribute=produselog	setting=Enable|Disable	Enabling the command tracks actions performed on the Server Administrator. The maximum size of the logfile is 50 MB.

An example command set only to remove the critical severities is as follows:

```
omconfig preferences logging attribute=oslogfilter logcrit=false
```

An example command set to enable the automatic backup of ESM logs.

```
omconfig preferences logging attribute=archiveesmlog setting=Enable
```

An example command set to enable the Log All ESM Sensor Events.

```
omconfig preferences logging attribute=logallsensors setting=Enable
```

An example command to set the Product Use Feedback.

```
omconfig preferences logging attribute=produselog setting=Enable logsize=4
```

Omconfig preferences webserver

Use the omconfig preferences webserver command to set the encryption levels of the Server Administrator web server, configure the URL launch point in the Server Administrator web server environment, and to set the JRE version for the Server Administrator.

The following table displays the name=value pairs you can use with this command:

Table 64. Valid Parameters Of Omconfig Preferences Webserver

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. **NOTE:** This attribute is deprecated in the future releases, use `ciphers` instead.
attribute=seturl	host=<*string*> port=<*value*>	Enables you to configure the Distributed Web Server (DWS) URL launch point, for accessing the management node. This command is used when Server Administrator Instrumentation Service and Remote Enablement are installed on the same system and the Server Administrator GUI is accessed using the DWS URL. **NOTE:** This command is not supported if the web server is present on the same system.
attribute=signalgorithm	setting=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.
attribute=setjre	jreversion=bundled | value	**bundled**: Sets the version bundled with Server Administrator. This is the default value. **value**: Sets the provided version, which is available on the system. To obtain the available versions on the system, type `omreport preferences webserver attribute=getjrelist`. For more details, see omreport preferences webserver.
attribute=exportcsr	N/A	Exports a Certificate Signing Request (CSR) file. The exported .csr file is saved at `<Server Administrator`

Table 64. Valid Parameters Of Omconfig Preferences Webserver (continued)

name=value pair 1	name=value pair 2	Description
		`installation directory>\apache-tomcat\temp`.
attribute=gennewcert	cn=<*common name*> org=<*organization name*> ou=<*organization unit name*> location=<*location name*> state=<*state name*> country=<*country name*> validity=<*validity*> keysize=<512 | 1024 | 2048> algorithm=<MD5 | SHA1 | SHA256 | SHA512> webserverrestart=<true | false>	Creates a new self-signed certificate for the SSL communication between the server running Server Administrator and the web server. **NOTE:** The country name (`country name`) must be of two characters, and validity (`validity`) must be in days. For country names, see the table, **Country names and codes**, provided later in this section. The `validity`, `keysize`, and `algorithm` parameters are optional. If you do not set any value for the optional parameters, Server Administrator assigns default values to the optional parameters. The default values of `validity`, `keysize`, and `algorithm` are `1095`, `2048`, and `SHA512` respectively. Restarting Server Administrator web server is optional, but the generated certificate comes to effect only after restarting the web server.
attribute=uploadcert	certfile=<*path of the certificate file*> type=<pkcs12> password=<*password of the certificate file*> webserverrestart=true | false	Allows you to import a PKCS#12 keystore that replaces the private key and certificate used in Server Administrator web server. PKCS#12 is public keystore that contains a private key and the certificate for a web server. Server Administrator uses the Java KeyStore (JKS) format to store the SSL certificates and its private key. Importing a PKCS#12 keystore to Server Administrator deletes the keystore entries, and imports a private key and certificate entries to the Server Administrator JKS. **NOTE:** If you are importing a PKCS#12 keystore, specify the type and password of the certificate. Restarting Server Administrator web server is optional, but the uploaded certificate comes to effect only after restarting the web server. **NOTE:** An error message is displayed if you either type an invalid PKCS file name or an incorrect password.
attribute=<ciphers>	setting=<valid ciphers text value>	Allows you to choose the ciphers that support the web server while configuring. SSL provides a secure connection between the web server and the browser.

Table 64. Valid Parameters Of Omconfig Preferences Webserver (continued)

name=value pair 1	name=value pair 2	Description
		The connection service does not start if an invalid cipher suite is set. **NOTE:** If an incorrect cipher value is set and the connection service fails to start, use the CLI command prompt or manually set the valid ciphers and restart the connection service.
attribute=<sslprotocol>	setting=<valid sslprotocol values are TLSv1.1| TLSv1.2| TLSv1.1, TLSv1.2|	Allows you to set the web server SSL protocols configuration from the valid values. The changes to take effect after web server restart.
attribute=<port>	setting=<valid port value>	Sets the number of secure ports that you want Server Administrator to use. The port value range from 1024 to 65535. The default port for Server Administrator is **1311**.
attribute=<ipaddress>	setting=<valid Binding IPAddress value>	Sets by default the web server to incoming browser requests on **ALL** IP addresses. However, for increased security you can specify a single IP address or, **ALL** IP addresses. An error message is displayed on an invalid entry of the configurable Bind List of IP Address. For the changes to take effect, restart the web server.
attribute=<sessiontimeout>	setting=<valid Session Timeout value between 1– 30>	Allows Server Administrator to time-out if there is no user input for a specified number of minutes. Users whose sessions time-out must log in again to continue.

An example command to set the URL launch point is as follows:

```
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 host name.

An example command to set the signing algorithm value is as follows:

```
omconfig preferences webserver attribute=signalgorithm setting=MD5
```

An example command to set the JRE versions is as follows:

```
omconfig preferences webserver attribute=setjre jreversion=<bundled | value>
```

An example command to export a Certificate Signing Request (CSR) is as follows:

```
omconfig preferences webserver attribute=exportcsr
```

The command creates a file of the format *xxxx*.csr in the <*Server Administrator installation directory*>\apache-tomcat\temp folder.

An example command to create a web server certificate is as follows:

```
omconfig preferences webserver attribute=gennewcert cn=HostName org=dell ou=ESG
location=RoundRock state=TX country=US validity=300 keysize=2048 algorithm=SHA512
webserverrestart=true
```

An example command to upload a certificate on the Server Administrator web server is as follows:

```
omconfig preferences webserver attribute=uploadcert certfile=C:/xyz.crt
webserverrestart=true
```

An example command to upload a certificate with a PKCS#12 keystore on the Server Administrator web server is as follows:

```
omconfig preferences webserver attribute=uploadcert certfile=C:/xyz.pfx type=pkcs12
password=abc webserverrestart=true
```

Table 65. Country names and codes

Country Names	Codes
AFGHANISTAN	AF
ALBANIA	AL
ALGERIA	DZ
AMERICAN SAMOA	AS
ANDORRA	AD
ANGOLA	AO
ANGUILLA	AI
ANTARCTICA	AQ
ANTIGUA AND BARBUDA	AG
ARGENTINA	AR
ARMENIA	AM
ARUBA	AW
AUSTRALIA	AU
AUSTRIA	AT
AZERBAIJAN	AZ
BAHAMAS	BS
BAHRAIN	BH
BANGLADESH	BD
BARBADOS	BB
BELARUS	BY
BELGIUM	BE
BELIZE	BZ
BENIN	BJ
BERMUDA	BM

Table 65. Country names and codes (continued)

Country Names	Codes
BHUTAN	BT
BOLIVIA	BO
BOSNIA AND HERZEGOWINA	BA
BOTSWANA	BW
BOUVET ISLAND	BV
BRAZIL	BR
BRITISH INDIAN OCEAN TERRITORY	IO
BRUNEI DARUSSALAM	BN
BULGARIA	BG
BURKINA FASO	BF
BURUNDI	BI
CAMBODIA	KH
CAMEROON	CM
CANADA	CA
CAPE VERDE	CV
CAYMAN ISLANDS	KY
CENTRAL AFRICAN REPUBLIC	CF
CHAD	TD
CHILE	CL
CHINA	CN
CHRISTMAS ISLAND	CX
COCOS (KEELING) ISLANDS	CC
COLOMBIA	CO
COMOROS	KM
CONGO	CG
CONGO, THE DEMOCRATIC REPUBLIC OF THE	CD
COOK ISLANDS	CK
COSTA RICA	CR
COTE D'IVOIRE	CI

Table 65. Country names and codes (continued)

Country Names	Codes
CROATIA (local name: Hrvatska)	HR
CYPRUS	CY
CZECH REPUBLIC	CZ
DENMARK	DK
DJIBOUTI	DJ
DOMINICA	DM
DOMINICAN REPUBLIC	DO
EAST TIMOR	TP
ECUADOR	EC
EGYPT	EG
EL SALVADOR	SV
EQUATORIAL GUINEA	GQ
ERITREA	ER
ESTONIA	EE
ETHIOPIA	ET
FALKLAND ISLANDS (MALVINAS)	FK
FAROE ISLANDS	FO
FIJI	FJ
FINLAND	FI
FRANCE	FR
FRANCE, METROPOLITAN	FX
FRENCH GUIANA	GF
FRENCH POLYNESIA	PF
FRENCH SOUTHERN TERRITORIES	TF
GABON	GA
GAMBIA	GM
GEORGIA	GE
GERMANY	DE
GHANA	GH

Table 65. Country names and codes (continued)

Country Names	Codes
GIBRALTAR	GI
GREECE	GR
GREENLAND	GL
GRENADA	GD
GUADELOUPE	GP
GUAM	GU
GUATEMALA	GT
GUINEA	GN
GUINEA-BISSAU	GW
GUYANA	GY
HAITI	HT
HEARD AND MC DONALD ISLANDS	HM
HOLY SEE (VATICAN CITY STATE)	VA
HONDURAS	HN
HONG KONG	HK
HUNGARY	HU
ICELAND	IS
INDIA	IN
INDONESIA	ID
IRAQ	IQ
IRELAND	IE
ISRAEL	IL
ITALY	IT
JAMAICA	JM
JAPAN	JP
JORDAN	JO
KAZAKHSTAN	KZ
KENYA	KE
KIRIBATI	KI

Table 65. Country names and codes (continued)

Country Names	Codes
KOREA, REPUBLIC OF	KR
KUWAIT	KW
KYRGYZSTAN	KG
LAO PEOPLE'S DEMOCRATIC REPUBLIC	LA
LATVIA	LV
LEBANON	LB
LESOTHO	LS
LIBERIA	LR
LIBYAN ARAB JAMAHIRIYA	LY
LIECHTENSTEIN	LI
LITHUANIA	LT
LUXEMBOURG	LU
MACAU	MO
MACEDONIA, THE FORMER YUGOSLAV REPUBLIC OF	MK
MADAGASCAR	MG
MALAWI	MW
MALDIVES	MV
MALTA	MT
MARSHALL ISLANDS	MH
MARTINIQUE	MQ
MAURITANIA	MR
MAURITIUS	MY
MAYOTTE	YT
MEXICO	MX
MICRONESIA, FEDERATED STATES OF	FM
MOLDOVA, REPUBLIC OF	MD
MONACO	MC
MONGOLIA	MN
MONTSERRAT	MS

Table 65. Country names and codes (continued)

Country Names	Codes
MOROCCO	MA
MOZAMBIQUE	MZ
MYANMAR	MM
NAMIBIA	NA
NAURU	NR
NEPAL	NP
NETHERLANDS	ML
NETHERLANDS ANTILLES	AN
NEW CALEDONIA	NC
NEW ZEALAND	NZ
NICARAGUA	NI
NIGER	NE
NIGERIA	NG
NIUE	NU
NORFOLK ISLAND	NF
NORTHERN MARIANA ISLANDS	MP
NORWAY	NO
OMAN	OM
PAKISTAN	PK
PALAU	PW
PALESTINIAN TERRITORY, OCCUPIED	PS
PANAMA	PA
PAPUA NEW GUINEA	PG
PARAGUAY	PY
PERU	PE
PHILIPPINES	PH
PITCAIRN	PN
POLAND	PL
PORTUGAL	PT

Table 65. Country names and codes (continued)

Country Names	Codes
PUERTO RICO	PR
QATAR	QA
REUNION	RE
ROMANIA	RO
RUSSIAN FEDERATION	RU
RWANDA	RW
SAINT KITTS AND NEVIS	KN
SAINT LUCIA	LC
SAINT VINCENT AND THE GRENADINES	VC
SAMOA	WS
SAN MARINO	SM
SAO TOME AND PRINCIPE	ST
SAUDI ARABIA	SA
SENEGAL	SN
SEYCHELLES	SC
SIERRA LEONE	SL
SINGAPORE	SG
SLOVAKIA (Slovak Republic)	SK
SLOVENIA	SI
SOLOMON ISLANDS	SB
SOMALIA	SO
SOUTH AFRICA	ZA
SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS	GS
SPAIN	ES
SRI LANKA	LK
ST. HELENA	SH
ST. PIERRE AND MIQUELON	PM
SURINAME	SR
SVALBARD AND JAN MAYEN ISLANDS	SJ

Table 65. Country names and codes (continued)

Country Names	Codes
SWAZILAND	SZ
SWEDEN	SE
SWITZERLAND	CH
TAIWAN	TW
TAJIKISTAN	TJ
TANZANIA, UNITED REPUBLIC OF	TZ
THAILAND	TH
TOGO	TG
TOKELAU	TK
TONGA	TO
TRINIDAD AND TOBAGO	TT
TUNISIA	TN
TURKEY	TR
TURKMENISTAN	TM
TURKS AND CAICOS ISLANDS	TC
TUVALU	TV
UGANDA	UG
UKRAINE	UA
UNITED ARAB EMIRATES	AE
UNITED KINGDOM	GB
UNITED STATES	US
UNITED STATES MINOR OUTLYING ISLANDS	UM
URUGUAY	UY
UZBEKISTAN	UZ
VANUATU	VU
VENEZUELA	VE
VIETNAM	VN
VIRGIN ISLANDS (BRITISH)	VG
VIRGIN ISLANDS (U.S.)	VI

Table 65. Country names and codes (continued)

Country Names	Codes
WALLIS AND FUTUNA ISLANDS	WF
WESTERN SAHARA	EH
YEMEN	YE
YUGOSLAVIA	YU
ZAMBIA	ZM
ZIMBABWE	ZW

Omconfig System Or 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 Or 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.

Defining alert actions

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

For example, if a fan probe on the system reads a fan RPM of 300 and your minimum warning threshold value for that fan probe is 600 RPM, then the 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

The following table displays the alert actions for each component that allows you to configure an alert action:

Table 66. Valid Parameters of Alert Actions For Warning and Failure Events

Alert Action Setting	Description
alert=true | false	**true**: Enables the 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 the system's console alert.
broadcast=true | false	**true**: Enables a message or alert to 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 or user groups upgraded to administrator or administrator groups cannot configure this alert action setting.
execapp=false	Disables the executable application.

Components and events for alert actions

The following table provides 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 67. Valid Parameters Of Events for 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.
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.

Table 67. Valid Parameters Of Events for Alert Actions (continued)

Event Name	Description
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.
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.

Example Set Alert Action Commands

The following are examples of valid example commands. For each successful command issued, the following message is displayed:

```
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

You can use the `omconfig system` or `omconfig servermodule` command to clear the following logs: the alert log, command log, and 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
```

NOTE: For more information about alert messages, see the *OpenManage Server Administrator Messages Reference Guide* at `dell.com/support/manuals`.

Omconfig system pedestinations or omconfig servermodule pedestinations

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

The following table displays the valid parameters for the command.

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

NOTE: Index 1 to 4 accepts an IPv4 address and index 5 to 8 accepts an IPv6 address. On YX2X generation of PowerEdge systems with iDRAC7 specific versions, the index can accept IPv4, IPv6, or FQDN.

Table 68. Valid Parameters Of Omconfig System Pedestinations Or 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* address | *ipv6 address* | *fqdn*>	Sets the IP address for the destination. **NOTE:** On YX2X generation of PowerEdge systems with iDRAC7 specific versions, **ipaddress** can also be a Fully Qualified Domain Name (FQDN).
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 or omconfig servermodule platformevents

Use the `omconfig system platformevents` or `omconfig servermodule platformevents` command to configure shutdown action, if any, 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*, the system is forcefully shut down 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.

The following table displays the valid parameters for the command.

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

Table 69. Parameters For Alert Action Command

Action	Description
action=disable	Disables the SNMP alert.
action=enable	Enables the SNMP alert.

Table 69. Parameters For Alert Action Command (continued)

Action	Description
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 on the power, and reboots the system.
action=poweroff	Turns off the electrical power to the system.
action=powerreduction	Reduces the processor speed until the power consumption comes down and reaches below the warning threshold. If the system power consumption remains below the warning threshold, increase the processor speed. **NOTE:** This action is applicable only for PowerEdge Rack and Tower systems earlier than 11th generation of PowerEdge systems.
action=reboot	Forces the operating system to shut down and initiates system startup, performs BIOS checks, and reloads the operating system.

Components and events of platform events

The following table 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 70. Valid Parameters Of 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 are enabled.
event=batterywarn	Sets action or enables or disables alert generation when a battery device detects that the battery is pending a failure condition.
event=batteryfail	Sets action or enables or disables alert generation when a battery device detects that the battery has failed.
event=discretevolt	Sets action or enables or disables alert generation when a discrete voltage probe detects that the voltage is too low for proper operation.
event=fanfail	Sets action or enables or disables alert generation when a fan probe detects that the fan is running too slow or not at all.
event=hardwarelogfail	Enables or disables alert generation when a hardware log detects a failure value.
event=intrusion	Sets action or enables or disables alert generation when a chassis is opened.
event=powerwarn	Sets action or enables or 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 or disables alert generation when a processor probe detects that the power supply is absent.
event=powerfail	Sets action or enables or 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 or 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 or disables alert generation when a processor probe detects that the processor has failed.

Table 70. Valid Parameters Of Omconfig System Platformevents (continued)

Event Name	Description
event=processorabsent	Sets action or enables or disables alert generation when a processor probe detects that the processor is absent.
event=redundegrad	Sets action or enables or 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 or 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 or disables alert generation when a temperature probe detects that the temperature is approaching the maximum high or low limits.
event=removableflashmediapresent	Sets actions that Server Administrator performs when the system detects a removable flash media.
event=removableflashmediawarn	Sets actions that Server Administrator performs when a removable flash media warning is displayed.
event=removableflashmediafail	Sets actions that Server Administrator performs when a removable flash media fails.
event=tempfail	Sets action or enables or 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 or disables alert generation when a voltage probe detects that the voltage is too low for proper operation.
event=intdualsdcardcritical	Sets actions that Server Administrator performs when an internal dual SD card critical event occurs.
event=intdualsdcardwarn	Sets actions that Server Administrator performs when an internal dual SD card warning is displayed.
event=intdualsdcardabsent	Sets actions that Server Administrator performs when an internal dual SD card is not available.
event=intdualsdcardredunlost	Sets actions that Server Administrator performs when the redundancy of an internal dual SD card is lost.
event=watchdogasr	Enables or disables alert generation configured by the ASR when the system has hung or is not responding.

Omconfig system snmptraptest or omconfig servermodule snmptraptest

Use the `omconfig system snmptraptest` or `omconfig servermodule snmptraptest` command to send the snmp test trap to the destination address if Server Administrator SNMP component is configured in the configuration file.

The following table displays the valid parameters for the command:

Table 71. Parameters For Alert Action Command

Action	Description
dest=<*ipv4* address | *ipv6 address* | *fqdn*>	Send the test trap to the destination IP address.

NOTE: This feature is not supported on VMware ESXi.

Omconfig System Events Or 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 are present on the 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 the 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. The following table displays the valid parameters for system event types.

Table 72. 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 is, 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 notification for event severity according to the number of the component by using the index=<*n*> parameter. The following table displays the valid severity parameters.

Table 73. 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 Or Omconfig Servermodule Webserver

Use the `omconfig system webserver` or `omconfig servermodule webserver` command to start or stop the Web server. The following table displays the valid parameters for the command.

Table 74. Valid Parameters Of Web Server Configuration

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 Or Omconfig Servermodule Recovery

Use the `omconfig system recovery` or `omconfig servermodule recovery` command to set the action 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. The following table lists the valid parameters for the command

NOTE: The upper and lower limits for the timer depend on the system model and configuration.

Table 75. Valid Parameters Of Omconfig System Recovery Or Omconfig Servermodule Recovery

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 on the power, and reboots the system. Power cycling is useful when you want to reinitialize system components such as hard drives.
timer=<*n*>	Number of seconds that must pass before the system is considered to have a 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 system to hang for 120 seconds, before a recovery action is initiated, type:

```
omconfig system recovery timer=120
```

or

```
omconfig servermodule recovery timer=120
```

Omconfig System Shutdown Or Omconfig Servermodule Shutdown

Use the `omconfig system shutdown` or `omconfig servermodule shutdown` command to determine how 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.

NOTE: The parameter `osfirst=false` is not available on YX3X generation and later systems. By default, on YX3X generation and later systems, the operating system shuts down before turning off the server during a remote shutdown.

The following table displays the valid parameters for the command.

Table 76. Valid Parameters Of System Shutdown

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.

Table 76. Valid Parameters Of System Shutdown (continued)

name=value pair	Description
action=powercycle	Turns off the electrical power to the system, pauses, turns on the power, and reboots the system. Power cycling is useful when you want to reinitialize system components such as hard drives.
osfirst=true | false	**true**: Closes the file system and exits the operating system before turning off the server. **false**: Does not close the file system or shuts down the operating system before turning off the server. **NOTE:** This command `osfirst=false` is not available on YX3X and later systems. By default, on YX3X and later systems, the operating system shuts down before turning off the server during a remote shutdown.

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
```

NOTE: The parameter `osfirst=false` is not available on YX3X and later systems. By default, on YX3X and later systems, the operating system shuts down before turning off the server during a remote shutdown.

Omconfig System Thrmshutdown Or Omconfig Servermodule Thrmshutdown

Use the `omconfig system thrmshutdown` or `omconfig servermodule thrmshutdown` command to configure a thermal shutdown action. You can configure the system for a thermal shutdown when a temperature probe detects a temperature probe warning or failure event.

The following table displays the valid parameters for the command:

Table 77. Valid Parameters Of Thermal Shutdown

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 degree 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 degree 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 the system. This section explains the parameters that are 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.

NOTE: Power Users and Administrators can add and edit asset information.

The following table lists the systems on which `omconfig` commands are applicable:

Table 78. System Availability for the omconfig Command

Command Level 1	Command Level 2	Applicable to
omconfig	servermodule	Blade systems
	mainsystem	Blade systems
	system	Rack and Tower systems
	chassis	Rack and Tower systems

Topics:

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. The following table displays the valid parameters for the command:

Table 79. Valid Parameters Of omconfig system assetinfo info=acquisition or 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 or servermodule	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 command 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 is displayed:

```
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, 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 is displayed:

```
Asset information set successfully.
```

Adding depreciation information

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

Table 80. Valid Parameters Of omconfig system assetinfo info=depreciation or 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 or servermodule	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 command 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 is displayed:

```
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.

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.

The following table displays the valid parameters for the command:

Table 81. Valid Parameters Of omconfig system assetinfo info=extwarranty Or 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 or servermodule	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 is displayed:

```
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 Command For Adding Acquisition Information.

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. The following table displays the valid parameters for the command.

Table 82. Valid Parameters Of omconfig system assetinfo info=lease Or 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 or servermodule	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 is displayed:

```
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 Command For Adding Acquisition Information.

Adding maintenance information

Maintenance refers to activities required to keep the system in good working order. The following table displays the valid parameters for adding maintenance information.

Table 83. Valid Parameters Of omconfig system assetinfo info=maintenance Or 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 or servermodule	assetinfo	info=maintenance	enddate=<*enddate*>	Date the extended warranty agreement ends.
				provider=<*provider*>	Business entity providing the maintenance service.

Table 83. Valid Parameters Of omconfig system assetinfo info=maintenance Or omconfig servermodule assetinfo info=maintenance (continued)

Command Level 1	Command Level 2	Command Level 3	Name= Value Pair 1	Name= Value Pair 2	Description
				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 is displayed:

```
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.

Adding outsource information

Outsourcing is the practice of contracting with another business to maintain the system in good working order. The following table displays the valid parameters for adding outsource information.

Table 84. Valid Parameters Of omconfig system assetinfo info=outsource Or 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 or servermodule	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 is displayed:

```
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 Command For Adding Acquisition Information.

Adding owner information

The owner is the party that holds legal property title to the system. The following table displays the valid parameters for adding owner information.

Table 85. Valid Parameters Of omconfig system assetinfo info=owner Or 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 or servermodule	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 is displayed:

```
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 Command For Adding Acquisition Information.

Adding service contract information

A service contract is an agreement that specifies fees for preventive maintenance and repair of the system. The following table displays the valid parameters for adding contract information.

Table 86. Valid Parameters Of omconfig system assetinfo info=service Or 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 or servermodule	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 is displayed:

```
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 Command For Adding Acquisition Information.

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. The following table displays the valid parameters for adding support information.

Table 87. Valid Parameters Of omconfig system assetinfo info=support Or 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 or servermodule	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, email address, or website address.
				outsourced=true | false	Whether an external business entity provides

Table 87. Valid Parameters Of omconfig system assetinfo info=support Or omconfig servermodule assetinfo info=support (continued)

Command Level 1	Command Level 2	Command Level 3	Name= Value Pair 1	Name= Value Pair 2	Description
					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 is displayed:

```
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 Command For Adding Acquisition Information.

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. The following table displays the valid parameters for adding system information.

Table 88. Valid Parameters Of omconfig system assetinfo info=system Or 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 or servermodule	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 is displayed:

```
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 Command For Adding Acquisition Information.

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. The following table displays the valid parameters for adding warranty information.

Table 89. Valid Parameters Of omconfig system assetinfo info=warranty Or 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 or servermodule	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 is displayed:

```
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 Command For Adding Acquisition Information.

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 OpenManage Server Administrator `omreport` and `omconfig` commands.

NOTE: For more information, see the *Dell EMC Server Administrator Installation Guide* and *Dell EMC Systems Management Tools And Documentation Guide* available at **dell.com/openmanagemanuals**. For more information on Storage Management, see the Storage Management online Help or the *Dell EMC Server Administrator Storage Management User's Guide* available at **dell.com/openmanagemanuals**.

Topics:

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
```

The following table describes these command levels.

Table 90. 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=<onnector:enclosureID:targetID | connector:targetID>`

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

Syntax Of Command Elements

The `omreport` and `omconfig` commands have multiple name=value pairs. These name=value pairs may include required, optional, and variable parameters. The following table describes the syntax used to indicate these parameters.

Table 91. Syntax For Name=Value Pairs

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 is 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 is 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 is 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.
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 is specified as `name=VirtualDisk1`.
[ ]	The bracket symbols ([ ]) indicate optional elements that you can choose whether or not to specify.

Table 91. Syntax For Name=Value Pairs (continued)

Syntax	Description
	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 only one is selected. For example, when creating a virtual disk, the `cachepolicy=d | c` indicates that the cache policy is 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 the storage system. The `omreport` command helps to get reports with the level of detail that you want.

The commands may 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 -?
```

The following table provides the `omreport storage` command syntax.

Table 92. 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.
		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.
		pciessed	Displays the properties of the PCIe SSD subsystem.
		nvmeadapter	Displays the list of NVMe adapters.

Topics:

- Omreport Connector Status
- Omreport Cachecade Status
- Omreport Storage Tape
- Omreport NVMe adapter

Omreport Physical Disk Status

The following table describes the syntax for the `omreport Physical Disk` commands.

Table 93. 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.
	cachecade=id where id is the cachecade number. For example, cachecade=1	Displays all physical disks included in the specified cachecade on the controller.
	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

The following table describes the syntax for the `omreport Virtual Disk` commands:

Table 94. 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

The following table describes the syntax for the `omreport Controller` commands.

Table 95. 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, HHHL cards, 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

The following sections provide the omreport storage enclosure command syntax required to execute the enclosure commands. The following table describes the syntax for the `omreport Enclosure` commands.

Table 96. 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.

Omreport Temperature Probe Status

The following table describes the syntax for the omreport Probe commands:

Table 97. 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.	Displays the temperature probes for the specified enclosure.

Table 97. omreport Temperature Probe Commands (continued)

Required Command Levels (1, 2, 3) and name=value pair	Optional name=value pairs	Use
	Example for SCSI controllers: controller=0 enclosure=2 info=temps. Example for SAS controllers: controller=0 enclosure=1:2 info=temps	
	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

The following table describes the syntax for the omreport Fan commands:

Table 98. 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 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.	Displays the fans for the specified enclosure.
	controller=id enclosure=<ENCLOSUREID> info=fans index=n 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	Displays the specified fan.

Omreport Power Supply Status

The following table describes the syntax for the omreport Power Supply commands:

Table 99. 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.

Table 99. Omreport Power Supply Commands (continued)

Required Command Levels (1, 2, 3) and name=value pair	Optional name=value pairs	Use
	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

The following table describes the syntax for the omreport EMM commands:

NOTE: The status of the EMMs is displayed as degraded if there is a mismatch between the EMM firmware.

Table 100. 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

The following table describes the syntax for the omreport Enclosure Slot Occupancy Report commands:

Table 101. 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, where id is the controller number and ENCLOSUREID is	Displays the empty and occupied slot details for the specified enclosure.

Table 101. Omreport Enclosure Slot Occupancy Report Commands (continued)

Required Command Levels (1, 2, 3) and name=value pair	Optional name=value pairs	Use
	the enclosure number. For example: controller=0 enclosure=2	**NOTE:** This command is not supported on Backplane, SCSI, and SWRAID controllers. **NOTE:** On MX5016s, the slot occupancy displays for empty slots and unmapped slots as empty slots for computes MX740c and MX840c.

Omreport Battery Status

The following table describes the syntax for the omreport Battery commands:

Table 102. 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

The following table describes the syntax for the omreport Global Information commands:

Table 103. 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. For more information, see Omconfig Global Enable Smart Thermal Shutdown. Displays the hot spare protection policy that you have set. For more information on setting hot spare protection policy, see the *Dell EMC OpenManage Server Administrator Storage Management User's Guide* at `dell.com/support/manuals`.

Omreport Connector Status

The following table describes the syntax for the omreport Connector commands:

Table 104. 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

The following table describes the syntax for the omreport Cachecade commands

Table 105. omreport Cachecade 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.

Omreport Storage Tape

The following table describes the syntax for the omreport storage tape command.

Table 106. Omreport Storage Tape Commands

Required Command Levels (1, 2, 3)	Optional name=value pairs	Use
omreport storage tape		Display tape drive properties.
	controller=id, where id is the controller number. For example: controller=0.	Displays all tape drives.
	connector=id	Displays all the tape drives on the specified connector.
	tape=<tape id>, where tapeid=id=<connector:targetID>	Displays the specified tape drive.

Omreport NVMe adapter

The following table describes the syntax for the `omreport nvmeadapter` commands.

Table 107. omreport NVMe adapter command

Required Command Levels (1, 2, 3) And name=value pair	Optional name=value pairs	Use
omreport storage nvmeadapter		Displays the properties of the NVMe adapters.
	controller=id, where id is the controller number. For example, controller=0.	Displays the properties of all the NVMe adapters on the specified controller.
	controller=id, nvmeid=id, where id is the controller number and the NVMe adapter respectively. For example, controller=0 nvmeid=1.	Displays the properties of the specified NVMe adapter on the specified controller.

8

Omconfig storage commands

The `omconfig` command allows you to configure physical disks, virtual disks, controllers, enclosures, batteries, global information, connectors, and cachecades.

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

```
omconfig storage -?
```

The following table provides the omconfig storage command syntax:

Table 108. 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 controller` 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.
		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.
		nvmeadapter	Displays a list of the `omconfig storage nvmeadapter` parameters for configuring the NVMe adapters.

Topics:

Omconfig Physical Disk Commands

The following sections provide the omconfig command syntax required to run physical disk tasks:

Table 109. 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=cryptographicerase 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>
	action=enabledevicewritecache controller=id pdisk=<PDISKID>
	action=disabledevicewritecache controller=id pdisk=<PDISKID>
	action=exportlog controller=id pdisk=<PDISKID> [filename=<filename>], the filename mentioned here is optional.
	action=convertraidtononraid controller=id pdisk=<PDISKID>
	action=convertnonraidtoraid controller=id pdisk=<PDISKID>
	action=setarraydiskcache controller=id pdisk=<PDISKID>

Omconfig Blink Physical Disk

Table 110. omconfig Blink Physical Disk

Description	Blinks the light (light emitting diode or LED display) on one or more physical disks attached to a controller.
Syntax	`omconfig storage pdisk action=blink controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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.

Table 110. omconfig Blink Physical Disk (continued)

Example 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	`omconfig storage pdisk action=blink controller=1 pdisk=0:0`
Example for SAS controllers	`omconfig storage pdisk action=blink controller=1 pdisk=0:2:0`

Omconfig Unblink Physical Disk

Table 111. omconfig Unblink Physical Disk

Description	Unblinks the light (light emitting diode or LED display) on one or more physical disks attached to a controller.
Syntax	`omconfig storage pdisk action=unblink controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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 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	`omconfig storage pdisk action=unblink controller=1 pdisk=0:0`
Example for SAS controllers	`omconfig storage pdisk action=unblink controller=1 pdisk=0:2:0`

Omconfig Prepare To Remove Physical Disk

Table 112. omconfig Prepare To Remove Physical Disk

Description	Prepares a physical disk for removal.
Syntax	`omconfig storage pdisk action=remove controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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 to	Prepares physical disk 3 on connector 0 of controller 1 for removal. On a SAS controller, the physical disk resides in enclosure 2.

Table 112. omconfig Prepare To Remove Physical Disk (continued)

Example for SCSI, SATA, and ATA controllers	`omconfig storage pdisk action=remove controller=1 pdisk=0:3`
Example for SAS controllers	`omconfig storage pdisk action=remove controller=1 pdisk=0:2:3`

Omconfig Instant Erase Secured Physical Disk

Table 113. omconfig Instant Erase Secured Physical Disk

Description	Erases the given encrypted disk. **NOTE:** This command is applicable only on Micron devices.
Syntax	`omconfig storage pdisk action=instantsecureerase controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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 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	`omconfig storage pdisk action=instantsecureerase controller=1 pdisk=0:3`
Example for SAS controllers	`omconfig storage pdisk action=instantsecureerase controller=1 pdisk=0:2:3`

Omconfig Cryptographic Erase Secured Physical Disk

Table 114. omconfig Cryptographic Erase Secured Physical Disk

Description	Erases the given encrypted disk. **NOTE:** This command is applicable only on Non-Volatile Memory Express (NVMe) devices.
Syntax	`omconfig storage pdisk action=cryptographicerase controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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.

Table 114. omconfig Cryptographic Erase Secured Physical Disk (continued)

Example 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	`omconfig storage pdisk action=cryptographicerase controller=1 pdisk=0:3`
Example for SAS controllers	`omconfig storage pdisk action=cryptographicerase controller=1 pdisk=0:2:3`

Omconfig Initialize Physical Disk

Table 115. omconfig Initialize Physical Disk

Description	Initializes a physical disk.
Syntax	`omconfig storage pdisk action=initialize controller=id pdisk=id`, where id is the controller ID and physical disk ID as reported by the omreport command. **NOTE:** 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 to	Initialize physical disk 4 on controller 1
Example	`omconfig storage pdisk action=initialize controller=1 pdisk=1:0:4`

Omconfig Offline Physical Disk

Table 116. omconfig Offline Physical Disk

Description	Makes a physical disk offline.
Syntax	`omconfig storage pdisk action=offline controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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 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	`omconfig storage pdisk action=offline controller=1 pdisk=0:3`
Example for SAS controllers	`omconfig storage pdisk action=offline controller=1 pdisk=0:2:3`

Omconfig Online Physical Disk

Table 117. omconfig Online Physical Disk

Description	Brings an offline physical disk back online.
Syntax	`omconfig storage pdisk action=online controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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 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	`omconfig storage pdisk action=online controller=1 pdisk=0:3`
Example for SAS controllers	`omconfig storage pdisk action=online controller=1 pdisk=0:2:30`

Omconfig Assign Global Hot Spare

Table 118. omconfig Assign Global Hot Spare

Description	Assigns a physical disk as a global hot spare.
Syntax	`omconfig storage pdisk action=assignglobalhotspare controller=id pdisk=<PDISKID> assign=yes`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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 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	`omconfig storage pdisk action=assignglobalhotspare controller=1 pdisk=0:3 assign=yes`
Example for SAS controllers	`omconfig storage pdisk action=assignglobalhotspare controller=1 pdisk=0:2:3 assign=yes`

Omconfig Available Spare

Table 119. omconfig Available Spare

Description	Assigns a physical disk as a global hot spare.
Syntax	`omconfig storage globalinfo action=setavailablesparethreshold type=`**<pcissd>** `warning_threshold=<1-99>`, critical_threshold=<1-99> where id is the controller ID. The **<pcissd>** variable specifies the PCISSD. **NOTE:** 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 to	Set available spare threshold on supported NVMe PCIe SSD.
Example for PCIe SSD	`omconfig storage globalinfo action=setavailablesparethreshold type=pciessd warning_threshold=20`

Omconfig Rebuild Physical Disk

Table 120. omconfig Rebuild Physical Disk

Description	Rebuilds a failed physical disk. Rebuilding a disk may take several hours. If you need to cancel the rebuild, use the **Cancel Rebuild** task. For more information about Rebuild Physical Disk, see the *Dell EMC OpenManage Online Help*.
Syntax	`omconfig storage pdisk action=rebuild controller=id pdisk=<`*`PDISKID`*`>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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 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	`omconfig storage pdisk action=rebuild controller=1 pdisk=0:3`
Example for SAS controllers	`omconfig storage pdisk action=rebuild controller=1 pdisk=0:2:3`

Omconfig Cancel Rebuild Physical Disk

Table 121. omconfig Cancel Rebuild Physical Disk

Description	Cancels a rebuild that is in progress. If you cancel a rebuild, the virtual disk remains in a degraded state. For more information about Cancel Rebuild Physical Disk, see the *Dell EMC OpenManage Online Help*.
Syntax	`omconfig storage pdisk action=cancelrebuild controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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 to	Cancel the rebuild of 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	`omconfig storage pdisk action=cancelrebuild controller=1 pdisk=0:3`
Example for SAS controllers	`omconfig storage pdisk action=cancelrebuild controller=1 pdisk=0:2:3`

Omconfig Cancel Replace Member

Table 122. omconfig Cancel Replace Member

Description	Cancels a replace member operation.
Syntax	`omconfig storage pdisk action=cancelreplacemember controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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 to	Cancel replace member operation on disk 0:0:1 which is connected to controller 0
Example	`omconfig storage pdisk action=cancelreplacemember controller=0 pdisk=0:0:1`

Omconfig Clear Physical Disk

Table 123. omconfig Clear Physical Disk

Description	Clears data or a configuration from a physical disk.
Syntax	`omconfig storage pdisk action=clear controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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 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	`omconfig storage pdisk action=clear controller=1 pdisk=0:2:3`

Omconfig cancel clear physical disk

Table 124. omconfig cancel clear physical disk

Description	Cancels a clear operation in progress on a physical disk.
Syntax	`omconfig storage pdisk action=cancelclear controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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 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 SCSI, SATA, and ATA controllers	`omconfig storage pdisk action=cancelclear controller=1 pdisk=0:2:3`

Omconfig Enable Device Write Cache

Table 125. omconfig Enable Device Write Cache

Description	Enables write cache on a physical disk for the PCIe SSD controller.
Syntax	`omconfig storage pdisk action=enabledevicewritecache controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk.

Table 125. omconfig Enable Device Write Cache (continued)

	NOTE: 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 to	Enable write cache on physical disk 3 on connector 0 of controller 1. On a SAS controller, the physical disk resides in enclosure 2.
Example for SAS controllers	`omconfig storage pdisk action=enabledevicewritecache controller=1 pdisk=0:2:3`

Omconfig Disable Device Write Cache

Table 126. omconfig Disable Device Write Cache

Description	Disables write cache on a physical disk for the PCIe SSD controller.
Syntax	`omconfig storage pdisk action=disabledevicewritecache controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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 to	Disable write cache on physical disk 3 on connector 0 of controller 1. On a SAS controller, the physical disk resides in enclosure 2.
Example for SAS controllers	`omconfig storage pdisk action=disabledevicewritecache controller=1 pdisk=0:2:3`

Omconfig Export Reliability Log

Table 127. omconfig Export Reliability Log

Description	Exports log on a physical disk or the NVMe adapter. The reliability log for the device PCIe SSD device or NVMe device is exported to the `Windows` folder on systems running Windows, and to `/var/log` directory on systems running Linux.
Syntax	`omconfig storage pdisk action=exportlog controller=id pdisk=<PDISKID> filename=<filename>`, where id is the controller ID . The **<PDISKID>** variable specifies the physical disk. **NOTE:** To obtain these values, type `omreport storage controller` to display the controller IDs and then type `omreport storage pdisk`

Table 127. omconfig Export Reliability Log (continued)

	`controller=ID` to display the IDs for the physical disks attached to the controller. **NOTE:** The <filename> is optional. If <filename> is not present, a default filename is assigned. **NOTE:** Depending on the PCIe SSD or NVMe device the log file name will be PCIeSSD_<device name>_<timestamp>.log or NVMe_<device name>_<timestamp>.log where the <device name> is the name of the device and timestamp is month, day, hour, minute and second during which the command is executed.
Example to	Export log on physical disk 3 on connector 0 of controller 1. On a SAS controller, the physical disk resides in enclosure 2.
Example for SAS controllers	`omconfig storage pdisk action=exportlog controller=1 pdisk=0:2:3`

Omconfig Convert RAID To Non-RAID

Table 128. Omconfig Convert RAID To Non-RAID

Description	Converts RAID to non-RAID on a physical disk.
Syntax	`omconfig storage pdisk action=convertraidtononraid controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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. **NOTE:** To convert multiple RAID to non-RAID on a given controller, use omconfig storage controller action=convertraidtononraid command. For more information, see omconfig Convert Multiple RAID To Non-RAID.
Example to	Convert RAID to non-RAID on physical disk 3 on connector 0 of controller 1. On a SAS controller, the physical disk resides in enclosure 2.
Example for SAS controllers	`omconfig storage pdisk action=raidtononraid controller=1 pdisk=0:2:3`

Omconfig Convert Non-RAID To RAID

Table 129. omconfig Convert Non-RAID To RAID

Description	Converts non-RAID to RAID on a physical disk.

Table 129. omconfig Convert Non-RAID To RAID (continued)

Syntax	`omconfig storage pdisk action=convertnonraidtoraid controller=id pdisk=<PDISKID>`, where id is the controller ID. The **<PDISKID>** variable specifies the physical disk. **NOTE:** 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. **NOTE:** To convert multiple non-RAID to RAID on a given controller, use `omconfig storage controller action=convertnonraidtoraid` command. For more information, see omconfig Convert Multiple Non-RAID To RAID.
Example to	Convert non-RAID to RAID on physical disk 3 on connector 0 of controller 1. On a SAS controller, the physical disk resides in enclosure 2.
Example for SAS controllers	`omconfig storage pdisk action=nonraidtoraid controller=1 pdisk=0:2:3`

Omconfig Set array disk cache

Table 130. Omconfig Set array disk cache

Description	Setting the disk cache policy on the given physical disk.
Syntax	`omconfig storage pdisk action=setarraydiskcache pdisk=<PDISKID> cache=<enable|disabled> controller=id`, where PDISKID=<connector:enclosureID:portID | connector:targetID>.
Example to	Set the disk cache policy on the physical disk.
Example	`omconfig storage pdisk action=setarraydiskcache pdisk=0:2:3 cache=disabled controller=0`

Omconfig virtual disk commands

The following table provides the `omconfig` command syntax required to run 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 131. 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

Table 131. Omconfig Manage Virtual Disk Commands (continued)

Required Command Levels (1, 2, 3)	Optional name=value pairs
	action=checkconsistency 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=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
	ction=changepolicy controller=id vdisk=id [readpolicy=<ra | nra | ara | rc | nrc> | writepolicy=<wb | wt | wc | nwc | fwb> | cachepolicy=<d | c> diskcachepolicy=<enabled | disabled>]
	action=replacememberdisk controller=id vdisk=id source=<PDISKID> destination=<PDISKID>
	action=rename controller=id vdisk=id
	action=enablefluidcache controller=id vdisk=id devicename=<string> cachepolicy=<wb | wt>
	action=disablefluidcache controller=id vdisk=id devicename=<string>
	action=reactivate controller=id vdisk=id devicename=<string>

Omconfig Check Consistency

Table 132. omconfig Check Consistency

Description	Initiates a check consistency on a virtual disk. The check consistency task verifies the virtual disk's redundant data.
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. **NOTE:** 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 to	Run a check consistency on virtual disk 4 on controller 1.
Example	`omconfig storage vdisk action=checkconsistency controller=1 vdisk=4`

Omconfig Pause Check Consistency

Table 133. omconfig Pause Check Consistency

Description	Pauses a check consistency while in progress. For more information, see the *Dell EMC OpenManage Online Help*.
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. **NOTE:** 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 to	Pause a check consistency on virtual disk 4 on controller 1
Example	`omconfig storage vdisk action=pausecheckconsistency controller=1 vdisk=4`

Omconfig cancel check consistency

Table 134. omconfig cancel check consistency

Description	Cancels a check consistency while in progress.
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. **NOTE:** 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 to	Cancel a check consistency on virtual disk 4 on controller 1.
Example	`omconfig storage vdisk action=cancelcheckconsistency controller=1 vdisk=4`

Omconfig Resume Check Consistency

Table 135. Omconfig Resume Check Consistency

Description	Resumes a check consistency after it has been paused.
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. **NOTE:** 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 to	Resume a check consistency on virtual disk 4 on controller 1.
Example	`omconfig storage vdisk action=resumecheckconsistency controller=1 vdisk=4`

Omconfig blink virtual disk

Table 136. Omconfig blink virtual disk

Description	Blinks the physical disks included in a virtual disk.
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. **NOTE:** 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 to	Blink the physical disks in virtual disk 4 on controller 1.
Example	`omconfig storage vdisk action=blink controller=1 vdisk=4`

Omconfig Unblink Virtual Disk

Table 137. omconfig Unblink Virtual Disk

Description	Unblinks the physical disks included in a virtual disk.
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. **NOTE:** 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 physical disks attached to the controller.
Example to	Unblink the physical disks in virtual disk 4 on controller 1.
Example	`omconfig storage vdisk action=unblink controller=1 vdisk=4`

Omconfig Initialize Virtual Disk

Table 138. omconfig Initialize Virtual Disk

Description	Initializes a virtual disk.
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. **NOTE:** 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 to	Initialize virtual disk 4 on controller 1
Example	`omconfig storage vdisk action=initialize controller=1 vdisk=4`

Omconfig Fast Initialize Virtual Disk

Table 139. omconfig Fast Initialize Virtual Disk

Description	Fast initializes a virtual disk.

Table 139. omconfig Fast Initialize Virtual Disk (continued)

	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.
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. **NOTE:** 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. **NOTE:** 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 to	Fast initialize virtual disk 4 on controller 1.
Example	`omconfig storage vdisk action=fastinit controller=1 vdisk=4`

Omconfig Slow Initialize Virtualize Disk

Table 140. Omconfig Slow Initialize Virtualize Disk

Description	Slow initializes 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.**
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. **NOTE:** 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. **NOTE:** 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 to	Slow initialize virtual disk 4 on controller 1.
Example	`omconfig storage vdisk action=slowinit controller=1 vdisk=4`

Omconfig cancel initialize virtual disk

Table 141. omconfig cancel initialize virtual disk

Description	Cancels the initialization of a virtual disk.

Table 141. omconfig cancel initialize virtual disk (continued)

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. **NOTE:** 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 to	Cancels the initialization of virtual disk 4 on controller 1.
Example	`omconfig storage vdisk action=cancelinitialize controller=id vdisk=id`

Omconfig cancel background initialize

Table 142. omconfig cancel background initialize

Description	Cancels the background initialization process on a virtual disk.
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. **NOTE:** 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 to	Cancel background initialization on virtual disk 4 on controller 1.
Example	`omconfig storage vdisk action=cancelbginitialize controller=1 vdisk=4`

Omconfig Assign Dedicated Hot Spare

Table 143. omconfig Assign Dedicated Hot Spare

Description	Assigns one or more physical disks to a virtual disk as a dedicated hot spare.
Syntax	`omconfig storage vdisk action=assigndedicatedhotspare controller=id vdisk=id pdisk=<PDISKID> assign=yes`, where id is the controller ID and virtual disk ID as reported by the omreport command. The `<PDISK>`variable specifies the physical disk. **NOTE:** 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 and physical disks attached to the controller.
Example to	Assign 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	`omconfig storage vdisk action=assigndedicatedhotspare controller=1 vdisk=4 pdisk=0:3 assign=yes`
Example for SAS controllers	`omconfig storage vdisk action=assigndedicatedhotspare controller=1 vdisk=4 pdisk=0:2:3 assign=yes`

Omconfig Delete Virtual Disk

Table 144. omconfig Delete Virtual Disk

Description	Deletes 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.**
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. **NOTE:** 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. **NOTE:** 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 to	Delete virtual disk 4 on controller 1
Example	`omconfig storage vdisk action=deletevdisk controller=1 vdisk=4`

Omconfig reconfiguring virtual disks

Table 145. omconfig reconfiguring virtual disks

Description	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. **NOTE:** If you want to reconfigure with an extra physical disk, the physical disk must be of the supported bus protocol, media type, sector size, T10 Protection Information capability, and encryption capability.
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>]`, where id is the controller ID and virtual disk ID as reported by the omreport command. **NOTE:** When you perform the virtual disk reconfiguration operation using the `sizeinpercent/vdcapacityexpansion` argument, Storage Management does not allow addition of physical disks to the existing reconfigured disk group. On successful operation, the virtual disk capacity is expanded, but the additional physical disk is not considered. **NOTE:** 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 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.

Table 145. omconfig reconfiguring virtual disks (continued)

Example for SCSI, SATA, and ATA controllers	`omconfig storage vdisk action=reconfigure controller=1 vdisk=4 raid=r5 size=800m pdisk=0:0:0,0:1:1,0:2:0,0:3:2`
Example for SAS controllers	`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 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.
Example	`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:** The `vdcapacityexpansion` parameter is supported only on PERC H700 and PERC H800 controllers. If you set `vdcapacityexpansion=yes`, specify `sizeinpercent`. If you do not set `vdcapacityexpansion`, specify size. **NOTE:** The `sizeinpercent` parameter is not supported on PERC S130 controller.

Omconfig Secure Virtual Disk

Table 146. omconfig Secure Virtual Disk

Description	Encrypts a virtual disk.
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. **NOTE:** 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 to	Encrypt virtual disk 4 on controller 1.
Example	`omconfig storage vdisk action=securevd controller=1 vdisk=4`

Omconfig Clear Virtual Disk Bad Blocks

Table 147. omconfig Clear Virtual Disk Bad Blocks

Description	Clears virtual disk bad blocks.
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. **NOTE:** 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 to	Clear bad blocks on virtual disk 4 on controller 1.
Example	`omconfig storage vdisk action=clearvdbadblocks controller=1 vdisk=4`

Omconfig Change Virtual Disk Policy

Table 148. omconfig Change Virtual Disk Policy

Description	Changes a virtual disk's read, write, or cache policy.
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. **NOTE:** 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. For more information about the controller-specific diskcache, read, write, and cache policy, see the *Dell EMC OpenManage Online Help*. 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 to	Change the read policy of virtual disk 4 on controller 1 to no-read-ahead.
Example	`omconfig storage vdisk action=changepolicy controller=1 vdisk=4 readpolicy=nra`

Omconfig Replace Member Virtual Disk

Table 149. omconfig Replace Member Virtual Disk

Description	Replaces the member of a given virtual disk with the destination disk.
Syntax	`omconfig storage vdisk action=replacememberdisk controller=id vdisk=id source=<PDISKID> destination=<PDISKID>`, where id is the controller ID and virtual disk ID as reported by the omreport command. The <*PDISK*> variable specifies the physical disk. **NOTE:** 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 to	Replace 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 Ccntrollers	`omconfig storage vdisk action=replacememberdisk controller=1 vdisk=4 source=0:3 destination=0:5`
Example for SAS controllers	`omconfig storage vdisk action=replacememberdisk controller=1 vdisk=4 source=0:2:3 destination=0:2:5`

Omconfig Rename Virtual Disk

Table 150. omconfig Rename Virtual Disk

Description	Renames a virtual disk.

Table 150. omconfig Rename Virtual Disk (continued)

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. **NOTE:** 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 to	Rename virtual disk 4 on controller 1 to vd4.
Example	`omconfig storage vdisk action=rename controller=1 vdisk=4 name=vd4`

Omconfig controller commands

The following table provides 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: If the PERC hardware controller is running in HBA mode, you can perform only one action, exporting the log (`action=exportlog`).

Table 151. 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=<default | disabled | enabled>] [name=<string>] [spanlength=<n>] | [secureflag=yes] [vdpienabled=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] [rate=<0 to 100>] [abortcheckconsistencyonerror=<enabled/disabled>][loadbalance=<auto/disabled>] [allowrevertiblehotspareandreplacemember=enabled/disabled] [autoreplacememberonpredictivefailure=<enabled/disabled>] [persistenthotspare=enabled/disabled][nrdiskcachepolicy=<enabled/disabled/unchanged>]
	action=discardpreservedcache controller=id force=<enabled/disabled>
	action=createsecuritykey controller=id keyid=<keyid> passphrase=<passphrase string> [escrow=yes] [filepath=<Absolute path to the escrow file>]

Table 151. omconfig Controller Commands (continued)

Required Command Levels (1, 2, 3)	Optional name=value pairs
	NOTE: If you set `escrow=yes`, specify the escrow file path.
	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`, 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 imported foreign configuration>
	action=importforeignconfig controller=id
	action=importrecoverforeignconfig controller=id
	action=clearforeignconfig controller=id
	action=setpdiskpwrmanagement controller=id spindownunconfigureddrives=<enabled/disabled> spindownhotspares=<enabled/disabled> spindownconfigureddrives=<enabled/disabled> idlec=<enabled/disabled> spindowntimeinterval=<30 to 1440>(minutes) spinupstarttime=<HH:MM:AM/PM> spinuptimeinterval=<1 to 24>(hours) **NOTE:** Specify `spinupstarttime` and `spinuptimeinterval` only when you set `spindownconfigureddrives=enabled`.
	action=setcontrollermode controller=id mode=<raid | hba>
	action=autoconfigureRAID0 controller=id
	action=setpatrolreadmode controller=id mode=<manual | auto | disable>
	action=startpatrolread controller=id
	action=stoppatrolread controller=id
	action=createcachecade controller=id pdisk=<PDISKID> [name=<string>]
	action=enablelkm controller=id keyid=<keyid> passphrase=<passphrase string> [escrow=yes] [filepath=<Absolute path to the escrow file>] **NOTE:** If you set `escrow=yes`, 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`, specify the escrow file path.
	action=rekeylkm controller=id
	action=convertraidtononraid controller=id pdisk=<PDISKID>
	action=convertnonraidtoraid controller=id pdisk=<PDISKID>

Omconfig Rescan Controller

Table 152. Omconfig Rescan Controller

Description	Rescans a controller. For more information, see the *Dell EMC OpenManage Online Help* .
Syntax	`omconfig storage controller action=rescan controller=id`, where id is the controller ID as reported by the `omreport storage controller` command.
Example to	Rescan controller 1.
Example	`omconfig storage controller action=rescan controller=1` **NOTE:** The rescan controller is not supported on non-RAID SCSI and SAS controllers. Reboot the system to make the configuration changes visible on non-RAID SCSI controllers.

Omconfig Enable Controller Alarm

Table 153. Omconfig Enable Controller Alarm

Description	Enables the controller alarm. For more information, see the *Dell EMC OpenManage Online Help* .
Syntax	`omconfig storage controller action=enablealarm controller=id`, where id is the controller ID as reported by the `omreport storage controller` command.
Example to	Enable the alarm on controller 1.
Example	`omconfig storage controller action=enablealarm controller=1`

Omconfig Disable Controller Alarm

Table 154. Omconfig Disable Controller Alarm

Description	Disables the controller alarm. For more information, see the *Dell EMC OpenManage Online Help* .
Syntax	`omconfig storage controller action=enablealarm controller=id`, where id is the controller ID as reported by the `omreport storage controller` command.
Example to	Disable the alarm on controller 1.
Example	`omconfig storage controller action=disablealarm controller=1`

Omconfig Quiet Controller Alarm

Table 155. omconfig Quiet Controller Alarm

Description	Silences an activated controller alarm. For more information, see the *Dell EMC OpenManage Online Help*.
Syntax	`omconfig storage controller action=quietalarm controller=id`, where id is the controller ID as reported by the `omreport storage controller` command.
Example to	Quiet the alarm on controller 1.
Example	`omconfig storage controller action=quietalarm controller=1`

omconfig Test Controller Alarm

Table 156. omconfig Test Controller Alarm

Description	Tests the functionality of the controller alarm. The alarm sounds for about two seconds. For more information, see *Dell EMC OpenManage Online Help*.
Syntax	`omconfig storage controller action=testalarm controller=id` , where id is the controller ID as reported by the `omreport storage controller` command.
Example to	Test the alarm on controller 1.
Example	`omconfig storage controller action=testalarm controller=1`

Omconfig Reset Controller Configuration

Table 157. Omconfig Reset Controller Configuration

Description	Resets 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 is 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.**
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 to	Reset the configuration on controller 1.
Example	`omconfig storage controller action=resetconfig controller=1`

omconfig Create Virtual Disk

The *Dell EMC 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 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`. You can create encrypted virtual disks 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=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]
[vdpienabled=yes]
```

NOTE: If the command-line interface does not support commas (,) as parameter separators, then use double quotation marks (“) to run the CLI command. Example, use **pdisk="0:1:1,0:1:2"** instead of *pdisk=0:1:1,0:1:2*.

NOTE: If you are configuring RAID for SAS controllers with firmware version 6.1 and later, `spanlength` is an optional parameter (default=2). `Spanlength` is an even number and is lesser than or equal to half the number of physical disks specified in `size`.

NOTE: The `vdpienabled` is an optional argument and is valid only on PERC9 controllers. If set to `yes` a T10 Protection Information (PI) enabled virtual disk is created.

NOTE: For RAID 10 creation, PERC 9 firmware suggests the layout (number of array disks) with uneven span (spans with unequal number of array disks), though in a span the number of disks remains even. For example, for 32 disks, RAID 10 gets created with all the disks in one span and for 34 disks, RAID 10 gets created with 16 disks in one span and 18 disks in the other span.

Example Syntax:

You can create a RAID-5 virtual disk of 500 MB with a stripe size of 16 KB on a PERC 3/QC controller. 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. The virtual disk has read-ahead, write–through caching, and cache I/O policies.

To create a virtual disk:

```
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. For more information on read, write, and cache policies that are supported by the controller, see the *Dell EMC OpenManage Online Help*.

Parameter specification for creating and reconfiguring virtual disk

The following table displays how to specify the `omconfig storage controller action=createvdisk` parameters:

Table 158. Parameters And Types

Parameters	Type
controller=id	Required
raid=<c | r0 | r1 | r1c | r5 | r6 | r10 | r50 | r60>	Required
size=<number | max | min>	Required
pdisk=<connector:targetID,connector:targetID,.....>	Required
[stripesize=<2k b| 4kb | 8kb | 16kb | 32kb | 64kb | 128kb>]	Optional

Table 158. Parameters And Types (continued)

Parameters	Type
[cachepolicy=<d | c>]	Optional
[readpolicy=<ra | nra | ara | rc | nrc>]	Optional
[writepolicy=<wb | wt | wc | nwc | fwb>]	Optional
[name=<string>]	Optional
[spanlength=<n>] parameter	Optional

NOTE: On PERC S140, the maximum virtual disk configuration is 16 and monitoring is 30.

`controller=id parameter`

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>`

Use the raid=<c | r0 | r1 | r1c | r5 | r6 | r10 | r50 | r60> parameter to specify a RAID level for a virtual disk. Different controllers support different RAID levels. For more information about RAID levels a controller supports and for general information about RAID levels, see the *Dell EMC OpenManage Online Help*. The following table displays how to specify the `raid=n` parameter for each RAID level.

Table 159. Raid level and parameter specification

RAID Level	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

`size=<number | max | min>`

The following table displays how to specify the size=<number | max | min>

Table 160. 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 is specified in b (bytes), m (megabytes), or g (gigabytes). For example, `size=500m` indicates that the virtual disk is 500 MB.
size=max	To create a virtual disk that is the maximum size possible, specify `size=max`. When creating an RAID-50 virtual disk, this parameter is 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 be included in the virtual disk.

When reconfiguring a virtual disk, you must specify all physical disks to include in the reconfigured virtual disk. The physical disk specification applies to physical disks in the original virtual disk and continues 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 to remove the physical disk.

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>`

Different controllers support different stripe sizes. For more information on stripe sizes supported for a controller, see the *OpenManage Online Help*. All stripe sizes are specified in kilobytes. For example, when specifying 128 KB as the stripe size, type: `stripesize=128kb`

`cachepolicy=<d | c>] parameter`

Different controllers support different cache policies. The following table displays how to specify the [cachepolicy=<d | c>] parameter for each of the cache policies.

Table 161. Cache Policy Parameters

Cache Policy	cachepolicy=d | c Parameter Specification
Direct I/O	cachepolicy=d
Cache I/O	cachepolicy=c

`diskcachepolicy=<disabled | enabled>`

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.

Table 162. Disk Cache Policy Parameters

Disk Cache Policy	diskcachepolicy=disabled | enabled Parameter Specification
Disabled	diskcachepolicy=disabled
Enabled	diskcachepolicy=enabled

`readpolicy=ra | nra | ara | rc | nrc>`

Different controllers support different read policies. The following table displays how to specify the readpolicy=<ra | nra | ara | rc | nrc> parameter for each of the read policies.

Table 163. Read Policy Parameters

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>]`

Different controllers support different write policies. The following table displays how to specify the writepolicy=<wb | wt | wc | nwc | fwb> parameter for each of the write policies.

Table 164. 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

Controller

`Controller=id` - Specify the controller ID as reported by the omreport storage controller command. For example,`controller=2`

Raid

Use the raid=<c| r0 | r1| r1c | r5 | r6 | r10 | r50 | r60> parameter to specify a RAID level for a virtual disk. Different controllers support different RAID levels. For more information about RAID levels a controller supports and for general information about RAID levels, see the *Dell EMC OpenManage Online Help*. The following table displays how to specify the `raid=n` parameter for each RAID level.

Table 165. Raid level and parameter specification

RAID level	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

size parameter

The following table displays how to specify the `size=<number | max | min>`

Table 166. 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 is specified in b (bytes), m (megabytes), or g (gigabytes). For example, `size=500m` indicates that the virtual disk is 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 is specified as `size=max`.
size=min	To create a virtual disk that is the minimum size possible, specify `size=min`.

stripesize

`stripesize=<2kb | 4kb | 8kb | 16kb | 32kb | 64kb | 128kb>`

Different controllers support different stripe sizes. For more information on stripe sizes supported for a controller, see the *Dell EMC OpenManage Online Help*. All stripe sizes are specified in kilobytes. For example, when specifying 128 KB as the stripe size, type: `stripesize=128kb`

PDISKID

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

Use this parameter to specify the physical disks to be included in the virtual disk.

When reconfiguring a virtual disk, you must specify all physical disks to include in the reconfigured virtual disk. The physical disk specification applies to physical disks in the original virtual disk and continues 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 to remove the physical disk.

The `pdisk=<PDISKID>` parameter indicates a physical disk by specifying either `connector:enclosureID:targetID or connector:targetID`.

Cachepolicy

`cachepolicy=<d | c>] Parameter`

Different controllers support different cache policies. The following table displays how to specify the [cachepolicy=<d | c>] parameter for each of the cache policies.

Table 167. Cache Policy Parameters

Cache Policy	cachepolicy=d | c Parameter Specification
Direct I/O	cachepolicy=d
Cache I/O	cachepolicy=c

Diskcachepolicy

`Diskcachepolicy=<disabled | enabled>`

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.

Table 168. Disk Cache Policy Parameters

Disk Cache Policy	**diskcachepolicy=disabled | enabled Parameter Specification**
Disabled	diskcachepolicy=disabled
Enabled	diskcachepolicy=enabled

Readpolicy

Different controllers support different read policies. The following table displays how to specify the readpolicy=<ra | nra | ara | rc | nrc> parameter for each of the read policies.

Table 169. Read Policy Parameters

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

Different controllers support different write policies. The following table displays how to specify the writepolicy=<wb | wt | wc | nwc | fwb> parameter for each of the write policies.

Table 170. 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

`name=<string>`

Use this parameter to specify a name for the virtual disk. For example:`name=VirtualDisk1`

spanlength

Use this parameter to specify the number of physical disks in each stripe. This parameter applies only to RAID-50 an RAID 60 and optional for RAID 10 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
```

Omconfig Set Controller Rebuild Rate

Table 171. Omconfig Set Controller Rebuild Rate

Description	Sets the controller rebuild rate.
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 to	Set the rebuild rate to 50 on controller 1.
Example	`omconfig storage controller action=setrebuildrate controller=1 rate=50`

omconfig Change Controller Properties

Table 172. omconfig Change Controller Properties

Description	Changes any or all of the controller properties.
Syntax	`omconfig storage controller action= setchangecontrollerproperties controller=<id> bgirate=<rate> reconstructrate=<rate> checkconsistencyrate=<rate> rebuildrate=<rate> clearredundantpath=clear`

Table 172. omconfig Change Controller Properties (continued)

	`abortcheckconsistencyonerror=<enabled | disabled> loadbalance=<auto | disabled> allowrevertiblehotspareandreplacemember=<enabled | disabled> autoreplacememberonpredictivefailure=<enabled | disabled> persistenthotspare=<enabled | disabled> nrdiskcachepolicy=<enabled | disabled | unchanged>`
Example to Example	Enable revertible hot spare and replace member operation. `omconfig storage controller action= setchangecontrollerproperties allowrevertiblehotspare andreplacemember=enabled controller=1`
Example to Example	Allows to enable, disable, or not to change the Non-RAID Hard Disk Drives. This is applicable only to Disk Cache Policy. `omconfig storage controller action= setchangecontrollerproperties controller=1 nrdiskcachepolicy=enabled`

Omconfig Discard Preserved Cache

Table 173. Omconfig Discard Preserved Cache

Description	Discards the preserved cache on the controller. **NOTE:** To check if the controller has a preserved cache, type `omreport storage controller controller=id`. If the system displays `Preserved Cache=yes`, it indicates the presence of the preserved cache.
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 to	Discard the preserved cache.
Example	`omconfig storage controller action= discardpreservedcache controller=1 force=enabled` **CAUTION: Discarding the preserved cache can result in data loss. It is recommended that you run this command using the force=disabled option.** **NOTE:** If a foreign configuration is detected, then the preceding command using `force=disabled` option fails. To avoid data loss, import the foreign configuration and flush the preserved cache to disk. To discard preserved cache forcefully, either clear the foreign configuration and run the proceeding command, or run the proceeding command using `force=enabled` option.

Omconfig Create Encryption Key

Table 174. Omconfig Create Encryption Key

Description	Creates the encryption key for the controller.

Table 174. Omconfig Create Encryption Key (continued)

Syntax	`omconfig storage controller action= createsecuritykey controller=id keyid=<keyid string> passphrase=<passphrase string>[escrow= yes]`
Example to	Create the encryption key for the controller.
Example	`omconfig storage controller action= createsecuritykey controller=1 keyid=Dell_123 passphrase=Dell_123 escrow=yes` **NOTE:** If you set `escrow=yes`, escrow file is copied to the location `C:/Windows` (for Microsoft Windows) and `/var/log` (for Linux / ESxi) in Managed Node when the DWS is used. File name will be generated having combination of `dellemc_<ControllerModel>_<SASAddress>.xml` as file name. Sample file name for an H740 controller with SAS address xxxyyzz will be dellemc_H740_xxxyyzz.xml.

Omconfig Change Encryption Key

Table 175. Omconfig Change Encryption Key

Description	Changes the encryption key for the controller, if passphrase is provided.
Syntax	`omconfig storage controller action= changesecuritykey controller=id keyid=<keyid string> passphrase=passphrase string> oldpassphrase=<old passphrase string>[escrow=yes]>`
Example to	Change the encryption key for the controller.
Example	`omconfig storage controller action= changesecuritykey controller=1 keyid=Dell_123 passphrase=Dell_123 oldpassphrase=Dell_321 escrow= yes` **NOTE:** If you set `escrow=yes`, escrow file is copied to the location `C:/Windows` (for Microsoft Windows) and `/var/log` (for Linux / ESxi) in Managed Node when the DWS is used. File name will be generated having combination of `dellemc_<ControllerModel>_<SASAddress>.xml` as file name. Sample file name for an H740 controller with SAS address xxxyyzz will be dellemc_H740_xxxyyzz.xml.

Omconfig Delete Encryption Key

Table 176. Omconfig Delete Encryption Key

Description	Deletes the encryption key for the controller.
Syntax	`omconfig storage controller action= deletesecuritykey controller=id`, where `id` is the controller ID as reported by the `omreport storage controller` command.
Example to	Change the encryption key for the controller.
Example	`omconfig storage controller action= deletesecuritykey controller=1`

Omconfig Set Background Initialization Rate

Table 177. Omconfig Set Background Initialization Rate

Description	Sets the background initialization rate.

Table 177. Omconfig Set Background Initialization Rate (continued)

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 to	Sets the background initialization rate to 50 on controller 1.
Example	`omconfig storage controller action=setbgirate controller=1 rate=50`

Omconfig Set Reconstruct Rate

Table 178. Omconfig Set Reconstruct Rate

Description	Sets the reconstruct rate.
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 to	Set the reconstruct rate to 50 on controller 1.
Example	`omconfig storage controller action= setreconstructrate controller=1 rate=50`

Omconfig Set Check Consistency Rate

Table 179. Omconfig Set Check Consistency Rate

Description	Sets the check consistency rate.
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 to	Sets the check consistency rate to 50 on controller 1.
Example	`omconfig storage controller action= setcheckconsistencyrate controller=1 rate=50`

Omconfig Export The Controller Log

Table 180. Omconfig Export The Controller Log

Description	Exports the controller log to a text file. For more information about the exported log file, see the *Dell EMC OpenManage Online Help*.
Syntax	`omconfig storage controller action=exportlog controller=id`, where `id` is the controller ID as reported by the `omreport storage controller` command.
Example to	Export the log on controller 1.
Example	`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. For more information on the controller log file, see the *Dell EMC OpenManage Online Help* . **NOTE:** The export log file command is not supported on the 4/IM, CERC ATA, and 100/4ch controllers.

Omconfig Import Secure Foreign Configuration

Table 181. Omconfig Import Secure Foreign Configuration

Description	Unlocks the encrypted Local Key Management (LKM) foreign configuration drives.
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 to	Unlock the ecncrypted LKM configuration drives on controller 1
Example	`omconfig storage controller action= importsecureforeignconfig controller=1 passphrase= Dell_123`

Omconfig Import Foreign Configuration

Table 182. Omconfig Import Foreign Configuration

Description	Imports all virtual disks that reside on physical disks newly attached to the controller.
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 to	Import foreign configurations on controller 1.
Example	`omconfig storage controller action= importforeignconfig controller=1`

Omconfig Import Or Recover Foreign Configuration

Table 183. Omconfig Import Or Recover Foreign Configuration

Description	Imports and recovers all virtual disks that reside on physical disks newly attached to the controller.
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 on firmware version 5.1.1 and later.
Example to	Import foreign configurations on controller 1.
Example	`omconfig storage controller action= importrecoverforeignconfig controller=1`

Omconfig Clear Foreign Configuration

Table 184. Omconfig Clear Foreign Configuration

Description	Clears or deletes all virtual disks that reside on physical disks newly attached to the controller.
Syntax	`omconfig storage controller action= clearforeignconfig 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.

Table 184. Omconfig Clear Foreign Configuration (continued)

Example to	Clear foreign configurations on controller 1.
Example	`omconfig storage controller action= clearforeignconfig controller=1`

Omconfig physical disk power management

Table 185. Omconfig physical disk power management

Description	Manages the power of physical disks in a controller by spinning down hot spares, configured drives, and unconfigured drives.
Syntax	`omconfig storage controller action= setpdiskpwrmanagement spindownunconfigureddrives= <enabled | disabled> spindownhotspares=<enabled | disabled> spindownconfigureddrives=<enabled | disabled> idlec=<enabled | disabled> spindowntimeinterval=<30 to 1440>(minutes) spinupstarttime=<HH:MM:AM/PM> spinuptimeinterval= <1 to 24>(hours)`, where `id` is the controller ID as reported by the `omreport storage controller` command. **NOTE:** On PERC 7 controllers, only `spindownunconfigureddrives`, `spindownhotspares`, and `spindowntimeinterval` parameters are supported. **NOTE:** You can specify `spinupstarttime` and `spinuptimeinterval` only when you set `spindownconfigureddrives=enabled`.
Example to	Spin down drives that are not configured or hot spares that are unattended for 30 minutes
Example	`omconfig storage controller action= setpdiskpwrmanagement spindownunconfigureddrives= enabled spindownhotspares=enabled spindowntimeinterval=30 controller=1`

Omconfig set controller mode

Table 186. Omconfig set controller mode

Description	Sets the mode of the controller to RAID, HBA or Enhanced HBA.
Syntax	`omconfig storage controller action=setcontrollermode controller=id mode=raid|hba|enhancedhba`, where `id` is the controller ID as reported by the `omreport storage controller` command. **NOTE:** If a virtual disk, hotspare, or encryption key is enabled on the controller, the controller mode cannot be changed to HBA. Reboot the system for the change to take effect. **NOTE:** If a virtual disk, hotspare or NON-RAID disk is present, the controller mode cannot be changed to RAID from Enhanced HBA mode.
Example to	Set the controller mode to HBA.
Example	`omconfig storage controller action=setcontrollermode controller=1 mode=hba`

Omconfig autoconfigure RAID0

Table 187. Omconfig autoconfigure RAID-0

Description	Automatically configures RAID–0 with all disks that are in ready state.

Table 187. Omconfig autoconfigure RAID-0 (continued)

Syntax	`omconfig storage controller action=autoconfigureRAID0 controller=id` , where `id` is the controller ID as reported by the `omreport storage controller` command.
Example to	Automatically configure RAID–0 with other disks.
Example	`omconfig storage controller action=autoconfigureRAID0 controller=1`

Omconfig Set Patrol Read Mode

Table 188. Omconfig Set Patrol Read Mode

Description	Sets the patrol read mode for the controller.
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 to	Sets the patrol read on controller 1 to manual mode
Example	`omconfig storage controller action= setpatrolreadmode controller=1 mode=manual`

Omconfig Start Patrol Read

Table 189. Omconfig Start Patrol Read

Description	Starts the patrol read task on the controller.
Syntax	`omconfig storage controller action=startpatrolread controller=id`, where `id` is the controller ID as reported by the `omreport storage controller` command.
Example to	Start the patrol read task on controller 1.
Example	`omconfig storage controller action=startpatrolread controller=1` **NOTE:** To start patrol read, the current patrol read mode is set to Manual.

Omconfig Stop Patrol Read

Table 190. Omconfig Stop Patrol Read

Description	Stops the patrol read task on the controller.
Syntax	`omconfig storage controller action=stoppatrolread controller=id`, where `id` is the controller ID as reported by the `omreport storage controller` command.
Example to	Stop the patrol read task on controller 1.
Example	`omconfig storage controller action=stoppatrolread controller=1` **NOTE:** To stop patrol read, the current patrol read mode is set to Manual.

Omconfig Create Cachecade

Table 191. Omconfig Create Cachecade

Description	Creates a cachecade on the given controller.
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 to	Create a cachecade on controller 0.
Example	`omconfig storage controller action=createcachecade controller=0 pdisk=0:2:3 name=Cachecade1`

Omconfig Enable LKM Controller

Table 192. Omconfig Enable LKM Controller

Description	Enables the LKM mode and creates the encryption key for the controller.
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 to	Create the encryption key for the controller.
Example	`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`, specify the escrow file path.

Omconfig Rekey LKM Controller

Table 193. Omconfig Rekey LKM Controller

Description	Re-keys the encryption key in LKM mode for the controller.
Syntax	`omconfig storage controller action=rekeylkm controller=id keyid=<keyid> 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 to	Re-key the encryption key for the controller.
Example	`omconfig storage controller action=rekeylkm controller=1`

Omconfig Convert Multiple RAID To Non-RAID

Table 194. Omconfig Convert Multiple RAID To Non-RAID

Description	Converts multiple RAID to non-RAID on the given controller.

Table 194. Omconfig Convert Multiple RAID To Non-RAID (continued)

Syntax	`omconfig storage controller action=convertraidtononraid controller=id pdisk=<PDISKID>`, 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 to	Convert multiple non-RAID to RAID on controller 0.
Example	`omconfig storage controller action=convertnonraidtoraid controller=0 pdisk=0:2:3`

Omconfig Convert Multiple Non-RAID To RAID

Table 195. Omconfig Convert Multiple Non-RAID To RAID

Description	Converts multiple non-RAID to RAID on the given controller.
Syntax	`omconfig storage controller action=convertnonraidtoraid controller=id pdisk=<PDISKID>`, 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 to	Convert multiple non-RAID to RAID on controller 0,
Example	`omconfig storage controller action=convertnonraidtoraid controller=0 pdisk=0:2:3`

Omconfig Enclosure Commands

The following table provides the omconfig command syntax required to execute enclosure tasks.

Table 196. 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> minwarn=n maxwarn=n
	action=blink controller=id enclosure=<ENCLOSUREID> minwarn=n maxwarn=n

Omconfig Enable Enclosure Alarm

Table 197. Omconfig Enable Enclosure Alarm

Description	Enables the enclosure alarm
Example to	Enable the alarm on the enclosure attached to connector 2 on controller 1.
Example for SCSI, SATA, and ATA controllers	`omconfig storage enclosure action=enablealarm controller=1 enclosure=2`
Example for SAS controllers	`omconfig storage enclosure action=enablealarm controller=1 enclosure=1:2`

Omconfig Disable Enclosure Alarm

Table 198. Omconfig Disable Enclosure Alarm

Description	Disables the enclosure alarm.
Syntax	`omconfig storage enclosure action=disablealarm controller=id enclosure=<ENCLOSUREID>`, where `id`is the controller ID. The `<ENCLOSUREID>` variable specifies the enclosure.
Example to	Disables the alarm on enclosure 2 attached to connector 1 on controller 1.
Example for SCSI, SATA, and ATA controllers	`omconfig storage enclosure action=disablealarm controller=1 enclosure=2`
Example for SAS controllers	`omconfig storage enclosure action=disablealarm controller=1 enclosure=1:2`

Omconfig Set Enclosure Asset Tag

Table 199. Omconfig Set Enclosure Asset Tag

Description	Specifies the enclosure's asset tag.
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 to	Specify the asset tag to encl20 on the enclosure attached to connector 2 on controller.
Example for SCSI, SATA, and ATA controllers	`omconfig storage enclosure action=setassettag controller=1 enclosure=2 assettag=encl20`
Example for SAS controllers	`omconfig storage enclosure action=setassettag controller=1 enclosure=1:2 assettag=encl20`

Omconfig Set Enclosure Asset Name

Table 200. Omconfig Set Enclosure Asset Name

Description	Specifies the asset name for an enclosure.
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 to	Specify the asset name to encl43 for the enclosure attached to connector 2 on controller 1.
Example for SCSI, SATA, and ATA controllers	`omconfig storage enclosure action=setassetname controller=1 enclosure=2 assetname=encl43`
Example for SAS controllers	`omconfig storage enclosure action=setassetname controller=1 enclosure=1:2 assetname=encl43`

Omconfig Set Temperature Probe Thresholds

Table 201. Omconfig Set Temperature Probe Thresholds

Description	Sets the minimum and maximum warning temperature thresholds for a specified temperature probe. **NOTE:** This command is not supported on SAS controllers.
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 alphanumeric string.
Example to	Set the temperature probe thresholds to 10 and 40 degree Celsius.
Example for SCSI, SATA, and ATA controllers	`omconfig storage enclosure action=settempprobes controller=1 enclosure=2 index=3 minwarn=10 maxwarn=40` **NOTE:** Here, temperature probe 3 resides in the enclosure attached to connector 2 on controller 1.

Omconfig Reset Temperature Probe Thresholds

Table 202. omconfig Reset Temperature Probe Thresholds

Description	Resets the minimum and maximum warning temperature thresholds back to their default values. **NOTE:** This command is not supported on SAS controllers.
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. In this syntax, *n* is a user-specified alphanumeric string.

Table 202. omconfig Reset Temperature Probe Thresholds (continued)

Example to	Reset the thresholds for temperature probe 3, residing in the enclosure attached to connector 2 on controller 1, to the default values.
Example for SCSI, SATA, and ATA controllers	`omconfig storage enclosure action=resettempprobes controller=1 enclosure=2 index=3` **NOTE:** Here, temperature probe 3 resides in the enclosure attached to connector 2 on controller 1.

Omconfig Set All Temperature Probe Thresholds

Table 203. Omconfig Set All Temperature Probe Thresholds

Description	Sets the minimum and maximum warning temperature thresholds for all temperature probes in the enclosure. **NOTE:** This command is not supported on SCSI RAID controllers.
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. In this syntax, *n* is a user-specified alphanumeric string.
Example to	Set the thresholds for all temperature probes residing in enclosure 3 attached to connector 2 on controller 1, to 10 and 40 degree Celsius.
Example for SAS controllers	`omconfig storage enclosure action=setalltempprobes controller=1 enclosure=2:3 minwarn=10 maxwarn=40`

Omconfig Reset All Temperature Probe Thresholds

Table 204. Omconfig Reset All Temperature Probe Thresholds

Description	Resets 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.
Syntax	`omconfig storage enclosure action=resetalltempprobes controller=id enclosure=<ENCLOSUREID>`, where `id` is the controller ID. The `<ENCLOSUREID>` variable specifies the enclosure. In this syntax, *n* is a user-specified alphanumeric string.
Example to	Reset the thresholds for all temperature probes in enclosure 3 attached to connector 2 on controller 1.
Example for SAS controllers	`omconfig storage enclosure action= resetalltempprobes controller=1 enclosure=2:3`

Omconfig Blink

Table 205. omconfig Blink

Description	Blinks the light-emitting diodes (LEDs) on the enclosure.

Table 205. omconfig Blink (continued)

Syntax	`omconfig storage enclosure action=blink controller=id enclosure=<ENCLOSUREID>`, where `id` is the controller ID. The `<ENCLOSUREID>` variable specifies the enclosure.
Example to	Blink the LEDs for enclosure 3 attached to connector 2 on controller 1.
Example for SAS controllers	`omconfig storage enclosure action=blink controller=1 enclosure=2:3`
Example for SCSI, SATA, and ATA controllers	`omconfig storage enclosure action=blink controller=1 enclosure=2`

Omconfig Battery Commands

The following table displays the omconfig command syntax required to execute battery tasks.

Table 206. 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

Table 207. Omconfig Start Battery Learn Cycle

Description	Starts the battery learn cycle.
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 to	Start the learn cycle on controller 1.
Example	`omconfig storage battery action=startlearn controller=1 battery=0`

Omconfig Delay Battery Learn Cycle

Table 208. Omconfig Delay Battery Learn Cycle

Description	Delays the battery learn cycle for a specified period of time. You can delay the battery learn cycle for a maximum of seven days or 168 hours.
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 to	Delay the learn cycle for three days and 12 hours on controller 1.

Table 208. Omconfig Delay Battery Learn Cycle (continued)

Example	`omconfig storage battery action=delaylearn controller=1 battery=0 days=3 hours=12`

Omconfig Global Commands

The following table displays 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 209. 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
	action=setremainingratedwriteendurancethreshold type=sassata | pcie threshold=<1-100>

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 degree 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 are shut down when the enclosure reaches a critical temperature of 0 or 50 degree Celsius. Specifying that only the enclosure is shut down during excessive temperatures is known as Smart Thermal Shutdown. For more information about Smart Thermal Shutdown, see the *Dell EMC OpenManage Online Help*.

Table 210. Omconfig Global Enable Smart Thermal Shutdown

Description	Enables smart thermal shutdown.
Syntax	`omconfig storage globalinfo action=enablests`
Example to	Enable thermal shutdown. The `omconfig` command syntax for enabling thermal shutdown does not require a controller or enclosure ID. **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.
Example	`omconfig storage globalinfo action=enablests`

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 degree Celsius.

Table 211. Omconfig Global Disable Smart Thermal Shutdown

Description	Disables smart thermal shutdown for all controllers.
Syntax	`omconfig storage globalinfo action=disablests`
Example to	Disable thermal shutdown. The `omconfig` command syntax for disabling thermal shutdown does not require a controller or enclosure ID. **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.
Example	`omconfig storage globalinfo action=disablests`

Omconfig Global Rescan Controller

Table 212. Omconfig Global Rescan Controller

Description	Rescans all the controllers on the system. For more information about Global Rescan Controller, see the *Dell EMC OpenManage Online Help*.
Syntax	`omconfig storage globalinfo action=globalrescan`
Example to	Do a global rescan of all controllers. The `omconfig` command syntax for rescanning all controllers on the system does not require a controller or enclosure ID. **NOTE:** Global rescan is not supported on non-RAID SCSI and SAS controllers. Reboot the system to make visible the OpenManage changes on non-RAID SCSI controllers.
Example	`omconfig storage globalinfo action=globalrescan`

Omconfig Set Hot Spare Protection Policy

Table 213. Omconfig Set Hot Spare Protection Policy

Description	Sets the hot spare protection policy for dedicated or global hot spares. For more information, see the *Dell EMC OpenManage Server Administrator Storage Management User's Guide* at `dell.com/support/manuals`.
Syntax	`omconfig storage globalinfo action= setprotectionpolicies type=dhs raid=<r1 | r5 | r6 | r10 | r50 | r60 | all> hscount=<1-16> warnlevel=<0-3> includeghsinvdstate=<yes | no>`, where `hscount` is the number of hot spares 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.
Example for	Global hot spare protection policy
Example	`omconfig storage globalinfo action=setprotectionpolicies type=dhs hscount=1 warnlevel=1 includeghsinvdstate=yes`

Omconfig global threshold for remaining rated write endurance

Table 214. Omconfig Global threshold for remaining rated write endurance

Description	Sets the threshold value for Remaining Rated Write Endurance (RRWE) SMART attribute for SSDs. When the remaining rate write endurance threshold drops below the configured threshold, an alert is logged. For more information about Global Threshold for Remaining Rated Write Endurance, see the *Dell EMC OpenManage Online Help*.
Syntax	`omconfig storage globalinfo action=setremainingratedwriteendurancethreshold type=<sassata|pciessd> threshold=<1-100>`
Example to	Settings supported for different threshold values for SAS, SATA and PCIe SSDs. The `omconfig` command syntax for Threshold RRWE value is set between 0 to 100. **NOTE:** The RRWE SMART attribute is not supported for SSDs connected to software RAID Controllers.
Example	`omconfig storage globalinfo action=setremainingratedwriteendurancethreshold type=sassata threshold=0.`

Omconfig Connector Commands

The following table displays the `omconfig` command syntax required to execute connector tasks.

Table 215. 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

Table 216. Omconfig Rescan Connector

Description	Rescans 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.
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 to	Rescan connector 2 on controller 1.
Example	`omconfig storage connector action=rescan controller=1 connector=2`

Omconfig cachecade commands

The following table displays the `omconfig` command syntax required to execute cachecade tasks.

Table 217. 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

Table 218. Omconfig Blink Cachecade

Description	Blinks the physical disks included in a cachecade.
Syntax	`omconfig storage cachecade action=blink controller=id cachecade=id`, where `id` is the controller ID and the 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 to	Blinks the physical disk in cachecade 4 on controller 1
Example	`omconfig storage cachecade action=blink controller=1 cachecade=4`

Omconfig Unblink Cachecade

Table 219. Omconfig Unblink Cachecade

Description	Unblinks the physical disks included in a cachecade.
Syntax	`omconfig storage cachecade action=unblink controller=id cachecade=id`, where `id` is the controller ID and the 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 to	Unblinks the physical disk in cachecade 4 on controller 1
Example	`omconfig storage cachecade action=unblink controller=1 cachecade=4`

Omconfig Delete Cachecade

Table 220. Omconfig Delete Cachecade

Description	Deletes a cachecade.
Syntax	`omconfig storage cachecade action=deletecachecade controller=id cachecade=id`, where `id` is the controller ID and the cachecade ID as reported by the `omreport` command. To obtain these values, type `omreport storage controller` to

Table 220. Omconfig Delete Cachecade (continued)

	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 to	Delete cachecade 4 on controller 1.
Example	`omconfig storage cachecade action=deletecachecade controller=1 cachecade=4`

Omconfig Resize Cachecade

Table 221. Omconfig Resize Cachecade

Description	Resizes a cachecade by adding or removing physical disks.
Syntax	`omconfig storage cachecade action=resize controller=id cachecade=id pdisk=<PDISKID>`, where `id` is the controller ID and the 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 to	Resize cachecade 4, use physical disks 0 through 3 on connector 0 of controller 1.
Example for SAS controllers	`omconfig storage cachecade action=resize controller=1 cachecade=4 pdisk= 0:2:0,0:2:1,0:2:2,0:2:3`
Example for SCSI, SATA, and ATA controllers	`omconfig storage cachecade action=resize controller=1 cachecade=4 pdisk=0:0,0:1,0:2,0:3`

Omconfig Rename Cachecade

Table 222. Omconfig Rename Cachecade

Description	Renames a cachecade.
Syntax	`omconfig storage cachecade action=rename controller=id cachecade=id name=<string>`, where `id` is the controller ID and the 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 to	Rename cachecade 4 on controller 1 to cc4.
Example	`omconfig storage cachecade action=rename controller=1 cachecade=4 name=cc4`

Omconfig NVMe adapter configuration commands

The following table displays the `omconfig` command syntax required to configure NVMe device properties.

Table 223. omconfig NVMe adapter commands

Required Command Levels (1, 2, 3)	Optional name=value pairs
omconfig storage nvmeadapter	action=exportlog controller=id nvmeid=id
	action=cryptographicerase controller=id nvmeid=id

Omconfig exporting controller log

Table 224. Omconfig exporting controller log

Description	Exports the NVMe PCIeSSD adapter reliability log of the Samsung NVMe adapter. The controller log is exported to the `Windows` folder on systems running Windows, and to `/var/log` directory on systems running Linux. **NOTE:** Depending on the device, the log file name for the NVMe PCIeSSD adapter `NVME_<device name>_<timestamp>.log` where <device name> is the name of the device and timestamp is month, day, hour, minute and second during which the command is executed.
Syntax	`omconfig storage nvmeadapter action=exportlog controller=id nvmeid=<NVMe adapter>`
Example to	Export the log of controller 1 on the NVMe adapter 1.
Example	`omconfig storage nvmeadapter action=exportlog controller=1 nvmeid=1`

Omconfig cryptographic erase

Table 225. Omconfig cryptographic erase

Description	Erases the specified NVMe device. **NOTE:** This option is supported only on NVMe devices.
Syntax	`omconfig storage nvmeadapter action=cryptographicerase controller=id nvmeid=<PCI slot>`
Example to	Erase the NVMe device on the PCI slot 1 of controller 1.
Example	`omconfig storage nvmeadapter action=cryptographicerase controller=1 nvmeid=1`

9

Working With CLI Command Results

Server Administrator Command Line Interface (CLI) users can use the command output in various ways. This chapter explains how to save command output to a file and how to select a format for the command results that fits different objectives. The following table displays the systems on which omreport commands are applicable.

Table 226. System Availability For The omreport Command

Command Level 1	Command Level 2	Applicable To
omreport	modularenclosure	Blade systems
	servermodule	Blade systems
	mainsystem	Blade systems
	system	Rack and Tower systems
	chassis	Rack and Tower systems

Topics:

Output Options For Command Results

CLI command output displays to standard output on the system in a command window, in an X-terminal, or on a screen, depending on the type of the 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 to write the command result. When specifying the path to which you want to write the file, use the appropriate syntax for the 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 Is 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 the 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:

Table 227. Partial Results

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:

Table 228. Result

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

Table 228. Result (continued)

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 the system and write the results to a file called **fans.txt**. 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:

Table 229. Append command results to an existing file

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	: 3622RPM
Minimum Warning Threshold	: 900RPM
Maximum Warning Threshold	: 3500RPM
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 The CLI Command Output

You can specify a format for the 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 the command results.

The available formats include:

- List (lst)
- Semicolon-separated values (ssv)
- Table (tbl)
- 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 named **summary.txt** .

List

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 the 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 is displayed as follows:

```
--------------
Network Data
--------------
Network Interface 0
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

Use the **tbl** or table formatting option to have the 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 0
------------------------------
| 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

Use the ssv formatting option to deliver output formatted in semicolon-separated value format. This format also allows you to import the 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 0
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
```

Custom delimited format

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
```

A

Identifying the series of your Dell EMC PowerEdge servers

The PowerEdge series of servers form Dell EMC are divided into different categories on the basis of their configuration. For easier reference, they are referred to as YX2X, YX3X, YX4X, YX4XX, or YX5XX series of servers. The structure of the naming convention is described below:

The letter Y denotes the alphabets in the server model number. The alphabets denote the form factor of the server. The form factors are described below:

- Cloud (C)
- Flexible(F)
- Modular (M or MX)
- Rack(R)
- Tower(T)

The letter X denotes the numbers in the server model number. The numbers denote multiple items about the server.

- The first X denotes the value stream or class of the server.
  - 1-5—iDRAC basic
  - 6-9—iDRAC Express
- The digit denotes the series of the server. It is retained in the server naming convention and not replaced by the letter X.
  - 0—series 10
  - 1—series 11
  - 2—series 12
  - 3—series 13
  - 4—series 14
  - 5—series 15
- The third X denotes the number of processor sockets a series of server supports. This is applicable only from series 14 of PowerEdge servers.
  - 1–one socket server
  - 2–two socket server
- The last X always denotes the make of the processor as described below:
  - 0—Intel
  - 5—AMD

Table 230. PowerEdge servers naming convention and examples

YX3X servers	YX4X systems	YX4XX systems	YX5XX
PowerEdge M630	PowerEdge M640	PowerEdge R6415	PowerEdge R6515
PowerEdge M830	PowerEdge R440	PowerEdge R7415	PowerEdge R7515
PowerEdge T130	PowerEdge R540	PowerEdge R7425	PowerEdge R6525