# Chassis Management Controller Version 1.35 for Dell PowerEdge VRTX RACADM Command Line Reference Guide

# Notes, Cautions, and Warnings

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

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

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

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# 1 Introduction

This document provides information about the RACADM subcommands, supported RACADM interfaces, and property database groups and object definitions of CMC for PowerEdge VRTX.

## Supported RACADM Interfaces

The RACADM command-line utility provides a scriptable interface that allows you to remotely configure your Remote Access Controller (RAC). The utility runs on the management station and the managed system. It is available on the *Dell OpenManage Systems Management and Documentation* DVD or at **support.dell.com**.

The RACADM utility supports the following interfaces:

- SSH or Telnet — Also referred as Firmware RACADM, is accessible by logging in to CMC using SSH or telnet. You do not have to specify the CMC IP, user name or password to run Firmware RACADM commands.
- Remote — Supports executing RACADM commands from a remote management station such as a laptop or desktop. You must install the DRAC Tools utility from the OpenManage software on the remote computer to run Remote RACADM commands. To execute Remote RACADM commands, you must formulate the command such as a an SSH/ Telnet RACADM command except that you must also use the **–r –i** options or the **–r –u –p** options. For more information about these options, see the "RACADM Subcommand Details."

## RACADM Syntax Usage

The following section describes the syntax usage for SSH/Telnet and Remote RACADM.

### SSH or Telnet RACADM

```
racadm getconfig -g <groupname> [-o <objectname>]
[-i <indexnumber>]

racadm <subcommand>
```

**Example**

```
racadm getconfig -g idracinfo

racadm getsysinfo
```

### Remote RACADM

```
racadm -r <racIpAddr> -u <username> -p <password> getconfig -g <groupname> [-o
<objectname>] [-i <indexnumber>]

racadm -r <racIpAddr> -u <username> -p <password> <subcommand>
```

**Example**

```
racadm -r <racIpAddr> -u <username> -p <password> getconfig -g <groupname>
idracinfo

racadm -r <racIpAddr> -u <username> -p <password> getsysinfo
```

## RACADM Command Options

The following table lists the options for the RACADM command.

| Option | Description |
|---|---|
| **-r**<*racIpAddr*><br>**-r** *racIpAddr* : <*port number*> | Specifies the controller's remote IP address.<br>Use: <*port number*> if the iDRAC port number is not the default port (443). |
| **-u** <*usrName*> | Specifies the user name that is used to authenticate the command transaction. If the **-u** option is used, the **-p** option must be used, and the **-i** option (interactive) is not allowed. |
| **-p** <*password*> | Specifies the password used to authenticate the command transaction. If the **-p** option is used, the **-i** option is not allowed. |
| **-S** | Specifies that RACADM should check for invalid certificate errors. RACADM stops the execution of the command with an error message if it detects an invalid certificate. |
| **-i** <*indexnumber*> | Specifies the index number for the indexed group, if applicable. |
| **-g** <*groupname*> | Specifies the group name, if applicable. |
| **-o** *objectname* | Specifies the object name, if applicable. |

The following table provides the supported RACADM interfaces.

| Type | Local RACADM | SSH/Telnet RACADM | Remote RACADM |
|---|---|---|---|
| CMC | No | Yes | Yes |

**NOTE:** Multiple instances of remote RACADM can be executed on a management station.

# Supported RACADM Subcommands

The following table provides the list of RACADM subcommands and their corresponding interface support. For more information about the RACADM sub-commands including syntax and valid entries, see RACADM Subcommand Details.

| Subcommand | CMC | |
|---|---|---|
| | Telnet/SSH/Serial | Remote RACADM |
| "?" and "?<subcommand>" | Yes | Yes |
| chassisaction | Yes | Yes |
| chassislog | No | No |
| closessn | Yes | Yes |
| clrsel | Yes | Yes |

| Subcommand | CMC | |
|---|---|---|
| cmcchangeover | Yes | Yes |
| config | Yes | Yes |
| connect | Yes | Yes |
| deploy | Yes | Yes |
| eventfilters | Yes | Yes |
| fanoffset | Yes | Yes |
| feature | Yes | Yes |
| featurecard | Yes | Yes |
| fwupdate | Yes | Yes |
| get | No | Yes |
| getactiveerrors | No | Yes |
| getassettag | Yes | Yes |
| getchassisname | Yes | Yes |
| getconfig | Yes | Yes |
| getdcinfo | Yes | Yes |
| getflexaddr | Yes | Yes |
| getioinfo | Yes | Yes |
| getled | Yes | Yes |
| getmacaddress | Yes | Yes |
| getmodinfo | Yes | Yes |
| getniccfg | Yes | Yes |
| getpbinfo | Yes | Yes |
| getpciecfg | Yes | Yes |
| getpminfo | Yes | Yes |
| getraclog | Yes | Yes |
| getractime | Yes | Yes |
| getredundancymode | Yes | Yes |
| getsel | Yes | Yes |
| getsensorinfo | Yes | Yes |
| getslotname | Yes | Yes |
| getssninfo | Yes | Yes |
| getsvctag | Yes | Yes |
| getsysinfo | Yes | Yes |

| Subcommand | CMC | |
|---|---|---|
| getversion | Yes | Yes |
| help and help <subcommand> | Yes | Yes |
| ifconfig | Yes | Yes |
| jobqueue | Yes | Yes |
| krbkeytabupload | No | Yes |
| license | No | Yes |
| netstat | Yes | Yes |
| ping | Yes | Yes |
| ping6 | Yes | Yes |
| racdump | Yes | Yes |
| racreset | Yes | Yes |
| racresetpcie | Yes | Yes |
| racresetcfg | Yes | Yes |
| raid | Yes | Yes |
| remoteimage | Yes | Yes |
| serveraction | Yes | Yes |
| set | No | Yes |
| setassettag | Yes | Yes |
| setflexaddr | Yes | Yes |
| setled | Yes | Yes |
| setniccfg | Yes | Yes |
| setpciecfg | Yes | Yes |
| setractime | Yes | Yes |
| setslotname | Yes | Yes |
| setsysinfo | Yes | Yes |
| sshpkauth | Yes | Yes |
| sslcertview | Yes | Yes |
| sslcsrgen | Yes | Yes |
| sslresetcfg | Yes | Yes |
| testemail | Yes | Yes |
| testfeature | Yes | Yes |
| testtrap | Yes | Yes |
| traceroute | Yes | Yes |

| Subcommand | CMC | |
|---|---|---|
| traceroute6 | Yes | Yes |

# Other Documents You May Need

To access the documents from the Dell Support site. Along with this Reference Guide, you can access the following guides available at **dell.com/support/manuals**.

- The *VRTX CMC Online Help* provides information about using the Web interface. To access the Online Help, click **Help** on the CMC web interface.
- The *Chassis Management Controller for PowerEdge VRTX User's Guide* provides information about using the VRTX–related Web interface features.
- The *Dell Chassis Management Controller (CMC) for Dell PowerEdge VRTX Version Release Notes* provides last-minute updates to the system or documentation or advanced technical reference material intended for experienced users or technicians.
- The *Integrated Dell Remote Access Controller 7 (iDRAC7) User's Guide* provides information about installation, configuration, and maintenance of the iDRAC on managed systems.
- The *Dell OpenManage Server Administrator's User's Guide* provides information about installing and using Server Administrator.
- The *Dell Update Packages User's Guide* provides information about obtaining and using Dell Update Packages as part of your system update strategy.
- The *Dell Shared PowerEdge RAID Controller (PERC) 8 User's Guide* provides information about deploying the Shared PERC 8 card and managing the storage subsystem. This document is available online at dell.com/storagecontrollermanuals.
- Dell systems management application documentation provides information about installing and using the systems management software.

The following system documents provide more information about the system in which VRTX CMC is installed:

- The safety instructions that came with your system provide important safety and regulatory information. For additional regulatory information, see the Regulatory Compliance home page at **www.dell.com/regulatory_compliance**. Warranty information may be included within this document or as a separate document.
- The *Dell PowerEdge VRTX Getting Started Guide* shipped with your system provides an overview of system features, setting up your system, and technical specifications.
- The setup placemat shipped with your system provides information about the initial system setup and configuration.
- The server module's *Owner's Manual* provides information about the server module's features and describes how to troubleshoot the server module and install or replace the server module's components. This document is available online at dell.com/poweredgemanuals.
- The rack documentation included with your rack solution describes how to install your system into a rack, if required.
- For the full name of an abbreviation or acronym used in this document, see the Glossary at dell.com/support/manuals.
- Systems management software documentation describes the features, requirements, installation, and basic operation of the software.
- Documentation for any components you purchased separately provides information to configure and install these options.
- Any media that ships with your system that provides documentation and tools for configuring and managing your system, including those pertaining to the operating system, system management software, system updates, and system components that you purchased with your system. For more information on the system, scan the Quick Resource Locator (QRL) available on your system and the system setup placemat that shipped with your system. Download the QRL application from your mobile platform to enable the application on your mobile device.

Updates are sometimes included with the system to describe changes to the system, software, and/or documentation. Always read the updates first, because they often supersede information in other documents.

# Accessing Documents From Dell Support Site

You can access the required documents in one of the following ways:

- Using the following links:
  - For all Systems Management documents — **dell.com/softwaresecuritymanuals**
  - For Remote Enterprise Systems Management documents — **dell.com/esmmanuals**
  - For Enterprise Systems Management documents — **dell.com/openmanagemanuals**
  - For Client Systems Management documents — **dell.com/clientsystemsmanagement**
  - For Serviceability Tools documents — **dell.com/serviceabilitytools**
  - For OpenManage Connections Enterprise Systems Management documents — **dell.com/OMConnectionsEnterpriseSystemsManagement**
  - For OpenManage Connections Client Systems Management documents — **dell.com/connectionsclientsystemsmanagement**
- From the Dell Support site:
  a. Go to **dell.com/support/manuals**.
  b. Under **General support** section, click **Software & Security**.
  c. In the **Software & Security** group box, click the required link from the following:
     - **Serviceability Tools**
     - **Enterprise System Management**
     - **Client System Management**
     - **Remote Enterprise System Management**
  d. To view a document, click the required product version.
- Using search engines:
  - Type the name and version of the document in the **Search** box.

# 2

# RACADM Subcommand Details

This section provides detailed descriptions about the RACADM subcommands, including the syntax and valid entries.

## Guidelines to Quote Strings Containing Special Characters When Using RACADM Commands

When using strings that contain special characters, use the following guidelines:

Strings containing the following special characters must be quoted using single quotation marks or double quotation marks:

- $ (dollar sign)
- " (double quotation marks)
- ' (single quotation marks)
- ` (back quotation marks)
- \ (backslash)
- ~ (tilde)
- ; (semicolon)
- | (vertical bar)
- ( (left parentheses)
- ) (right parentheses)
- & (ampersand)
- > (greater than)
- < (less than)
- # (pound)
- ASCII code 32 (space)

**NOTE:** The - (dash) character cannot be the first character of the string, regardless of whether the string is quoted.

There are different escaping rules for using single quotation mark and double quotation marks.

**For double quoting:**

The following characters must be escaped by prepending a backslash:

- $ (dollar sign)
- " (double quotation marks)
- ' (single quotation marks)
- ` (back quotation marks)
- \ (backslash)

For example, use the following for a string that contains the special characters, $, ",',`and \.

**For single quotation marks:**

- No character escaping is necessary.
- A single quotation mark cannot be used even with a backslash escaped.

**NOTE:** An empty string may be specified as either "" (using double quotation marks) or '' (using single quotation mark).

# "?"and "?<subcommand>"

| | |
|---|---|
| **Description** | Displays all the subcommands you can use with the RACADM command and a one-line description of each subcommand.<br>? followed by <*subcommand*> displays the syntax for the specified command.<br>To use this subcommand, you must have the **CMC Login User** privilege.<br>You can also use the **help** and **help <*subcommand*>** commands to obtain the same information. |
| **Synopsis** | `racadm ?`<br>`racadm ? <subcommand>` |
| **Input** | NA |
| **Output** | NA |

**Example for RACADM ?**

The following output example shows only part of the actual output for the racadm ? command. Descriptions shown in this example may vary slightly from the descriptions in your racadm session.

```
racadm ?

help            -- list racadm subcommand description
help <subcommand> -- display usage summary for a subcommand
?               -- list racadm subcommand description
? <subcommand>  -- display usage summary for a subcommand
arp             -- display the networking arp table
chassisaction   -- execute chassis or switch power-up/down/cycle or
KVM powercycle
clrraclog       -- clear the CMC log
clrsel          -- clear the System Event Log (SEL)
cmcchangeover   -- Changes the redundant state of the CMC from active
to standby and vice versa
config          -- modify CMC configuration properties
...
setniccfg       -- modify network configuration properties
setractime      -- set the time on the CMC
setslotname     -- sets the name of the slot in the chassis
setsysinfo      -- set the chassis name and chassis location
sslcertview     -- display a CA/server certificate in the CMC
sslcsrgen       -- generate a certificate CSR from the CMC
testemail       -- test CMC e-mail notifications
testfeature     -- test CMC feature x
testtrap        -- test CMC SNMP trap notifications
traceroute      -- determine the route of a packet
traceroute6     -- determine the route of a packet
```

**Example for RACADM ? <*subcommand*>**

```
racadm ? getsysinfo

getsysinfo -- display general CMC and system information
Usage:
```

```
racadm getsysinfo [-d] [-c] [-A] [-4] [-6]
------------------------------------------------------------
Valid Options:
-d : show CMC information
-c : show chassis information
-A : do not show headers or labels
-4 : show CMC IPv4 information
-6 : show CMC IPv6 information
```

# help and help <subcommand>

**Description** Lists all the subcommands available for use with **RACADM** and provides a short description for each. You may also type a subcommand after `help`.

**Synopsis**

- `racadm help`
- `racadm help <subcommand>`

**Input** None

**Output**

- The **help** command displays a complete list of subcommands.

**Example** `racadm help getsysinfo`

# chassislog

**Description** Allows you to view, export, or clear the chassis log history.

To clear a chassis log, you must have the **Clear Logs Administrator** privilege.

**NOTE:** It is recommended that you use Firmware RACADM to run this subcommand.

**Synopsis**

```
racadm chassislog view -i <nNumber of records>
 -c <log type> -s <severity>
-q <sequence no.> -n <number of records>
-r <start timestamp> -e <end timestamp>
```

**Input**

- -i — Displays the number of records present in the active log. You cannot use this option with any other option.
- -c — The log type to filter the records. Provide multiple categories using a "," as the delimiter. The value is case-insensitive. Valid Category values:
  - All
  - System
  - Storage
  - Updates
  - Audit
  - Config
- -q - The sequence number from which the records must be displayed.
- -n - Specifies the n Number of records to be displayed.
- -r - Displays events that have occurred after this time. The time format is yyyy-mm-dd HH:MM:SS. The time stamp must be provided within double quotes.
- -e - Displays events that have occurred before this time. The time format is yyyy-mm-dd HH:MM:SS. The time stamp must be provided within double quotes.
- -f <*filename*> - Specifies the file location and name where the chassis log is exported.

- -a <*name*> - Specifies the FTP Server IP address or FQDN, user name, and password.
- -d <*path*> - Specifies the path to the file on the FTP server.
- -l <*location*> - Specifies the location of the network share or area on file system where chassis log is exported. Two types of network shares are supported:

  — SMB mounted path: //<*ipaddress or domain name*>|<*share_name*>|<*path_to_image*>

  — NFS mounted path: <*ipaddress*>:|<*path_to_image*>.
- -u <*user*> — Specifies the user name for accessing the FTP Server, or Domain and User Name for accessing network share location.
- -p <*password*> — Specifies the password for accessing the FTP Server or Share location.
- -s — The severity used to filter the records. Provide multiple severities using a "," as the delimiter. The value is case-insensitive. Valid Severity values:
  - 1. Warning
  - 2. Critical
  - 3. Info

**NOTE:** To view or export the Chassis log, only the **CMC Login User** privilege is required.

**Example**

- Display the number of records present in the Chassis Log:

  ```
  racadm chassislog view -i
  ```
- Display the records under the storage category with severity set to warning:

  ```
  racadm chassislog view -c storage -s warning
  ```
- Display the records under storage and system categories with severities set to warning or critical:

  ```
  racadm chassislog view -c storage,system -s
  warning,critical
  ```
- Display the records having severities set to warning or critical, starting from sequence number 4:

  ```
  racadm chassislog view -s warning,critical -q 4
  ```
- Display 5 records starting from sequence number 20:

  ```
  racadm chassislog view -q 20 -n 5
  ```
- Display all records of events that have occurred between 2011-01-02 23:33:40 and 2011-01-03 00:32:15:

  ```
  racadm chassislog view -r "2011-01-02 23:33:40" -e
  "2011-01-03 00:32:15"
  ```
- Display all the available records from the active Chassis log:

  ```
  racadm chassislog view -n all
  ```
- Display the last 25 records from the Chassis log:

  ```
  racadm chassislog view
  ```

# chassislog export

**Description**

Exports the Chassis log to a remote share.

To export the chassis log, you must have the **Clear Logs Administrator** privilege.

**Synopsis**

```
racadm chassislog export -f<filename> -u<username> -
p<password> -l<CIFS or NFS share>
```

```
racadm -r<CMC ip> -u<CMC username> -p<CMC password>
chassislog export -f<filename> -u<username> -p<password> -
l<CIFS or NFS share>
```

**Input**

- –f : Filename of the exported Chassis Log.
- –u : Username for the remote share to where the file must be exported. Username in a domain can be given as domain/username
- –p : Password for the remote share to where the file must be exported.
- –l : Network share location (see the "Example" section for NFS or CIFS share) to where the Chassis Log must be exported.

**Example**

- Export the Chassis Log to a remote CIFS share

  ```
  racadm chassislog export -f Mylog.xml -u admin -p mypass
  -l //10.94.161.103/share
  ```

  - Export the Chassis Log to a remote NFS share

  ```
  racadm chassislog export -f Mylog.xml -l 10.94.161.103:/
  home/lclog_user
  ```

# chassislog clear

**Description**

Deletes the data in the chassis log.

To clear the chassis log, you must have the **Clear Logs Administrator** privilege.

**Synopsis**

```
racadm chassislog clear racadm -r<CMC ip> -u<CMC username> -
p<CMC password> chassislog clear
```

**Example**

- Clear the Chassis Log

  ```
  racadm chassislog clear
  ```

- Clear the Chassis Log using remote racadm

  ```
  racadm -r 10.94.161.119 -u root -p calvin chassislog
  clear
  ```

# chassisaction

**Description**

Executes a power action on the chassis or a server.

To use this subcommand, you must have the **Chassis Control Administrator** privilege.

**Synopsis**

```
racadm chassisaction [-m <module>]
<action>
```

**Input**

- -m <*module*> — Module on which you want to carry out the action. Values are:
  - chassis - this is the default value, if **-m** is not specified.
  - **switch-n**, where n=1
- <*action*> — Action that you want to execute on the specified module. Values are:

- powerdown — (Chassis only) Turns off the chassis.
- powerup — (Chassis only) Turns on the chassis.
- powercycle — Power cycles the module.
- nongraceshutdown — (Chassis only) Non-gracefully turns off the chassis.
- reset — Performs a hard reset of the module.

When <*module*> = switch, <*action*> must be powercycle or reset.

**Output**

None

**Example**

Perform a reset of switch-1:

```
racadm chassisaction -m switch-1 reset

Module power operation successful.
```

# closessn

**Description**

Closes a communication session on the device. Use the `getssninfo` command to view a list of sessions that can be closed using this command.

To use this subcommand, you must have the **Administrator** privilege.

**Synopsis**

- `racadm closessn –i <session id>`
- `racadm closessn -a`
- `racadm closessn -u <username>`

**Input**

- **-i**<*session id*> — The session ID of the session to be ended, which can be retrieved using RACADM **getssninfo** subcommand.

  Session executing this command cannot be ended.
- **-a** — Closes all sessions.
- **-u** ***<user name>***— Close all sessions for a particular user name.
  - Remote RACADM: **-u** option or **-i** option

**Output**

None

**Example**

- `racadm closessn –i 1234`

  Closes the session 1234.
- `racadm closessn –u root`

  Closes all the sessions for root user.
- `racadm closessn –a`

  Closes all the sessions.

# clrsel

**Description** Deletes all existing records from the System Event Log (SEL).

To use this subcommand, you must have the **Clear Logs** privilege.

**Synopsis**

```
racadm clrsel
```

# cmcchangeover

**Description** Changes the state of the CMC from active to standby, or vice versa, in a redundant CMC configuration. This subcommand is useful for remote debugging or testing purposes.

To use this subcommand, you must have the **Administrator** privilege.

**NOTE:** This command is valid only in redundant CMC environments. For more information, see the "Understanding the Redundant CMC Environment" section of the *Dell Chassis System User Guide*.

**Synopsis**

```
racadm cmcchangeover
```

**Input** None

**Output**

```
CMC failover initiated successfully.
```

**Example**

```
racadm cmcchangeover
```

# config

**Description** Allows you to set CMC configuration parameters individually or to batch them as part of a configuration file. If the data is different, that CMC object is written with the new value.

**Synopsis**

```
racadm config [-c|-p] -f <filename>

racadm config -g <groupName> -o <objectName> [-i
<index>] <Value>
```

**NOTE:** The configuration file retrieved using remote racadm are not interoperable. For the config **-f** <*file name*> command, use the configuration file retrieved from the same interface.

**Input**

**NOTE:** The **-f** and **-p** options are not supported for the serial/Telnet/SSH console.

- **-f** — The **-f** <*filename*> option causes config to read the contents of the file specified by <*filename*> and configure CMC.
- **-p**— This option must be used with the **-f** option. It directs **config** to delete the password entries contained in the config file **-f** <*filename*> after the configuration is complete.

  To apply the password, you must remove the preceding Read-Only marker '#' in the config file before executing the config **-f** command.
- **-g**— The **-g** <*groupName*>, or **group** option, must be used with the **-o** option. The <*groupName*> specifies the group containing the object that is to be set.
- **-o** — The **-o** <*objectName*> <*Value*>, or **object** option, must be used with the **-g** option. This option specifies the object name that is written with the string <*value*>.

- **-i** — The **-i** <*index*>, or **index** option, is valid only for indexed groups and can be used to specify a unique group. The <*index*> is a decimal integer from 1 through n, where n can vary from 1 to maximum number of indexes a particular group supports. If **-i** <*index*> is not specified, a value of 1 is assumed for groups, which are tables that have multiple entries. The index is specified by the index value, not a named value.
- **-c** — The **-c,** or **check** option, is used with the **config** subcommand and allows the user to parse the **.cfg** file to locate syntax errors. If issues are found, the line number and a short description about the issue is displayed. This option is a check-only.

**Output**

This subcommand generates error output for any of the following reasons:

- Invalid syntax, group name, object name, index, or other invalid database members.
- RACADM CLI failures.

This subcommand returns an indication of the number of configuration objects that were written out of the total objects in the **.cfg** file.

**Examples**

- `racadm config -g cfgLanNetworking -o cfgNicIpAddress 10.35.10.100.`

  Sets the **cfgNicIpAddress** configuration parameter (object) to the value 10.35.10.110. This IP address object is contained in the **cfgLanNetworking** group.
- `racadm config -f myrac.cfg.`

  Configures or reconfigures CMC. The **myrac.cfg** file may be created from the **getconfig** command. This file may also be edited manually as long as the parsing rules are followed.

**NOTE:** The **myrac.cfg** file does not contain passwords. To include passwords in the file, you must enter them manually. If you want to remove password information from the **myrac.cfg** file during configuration, use the **-p** option.

# connect

**Description**

Connects to the switch or server serial console.

**Synopsis**

- `racadm connect [-b] <server-n>`
- `racadm connect [-b] <switch-n>`

**Input**

**-b —** Connects to the switch or console using the binary mode. This is an optional argument; a server or a switch must be present.

**NOTE:** If you use the **-b** option, reset the CMC to terminate the connect operation.

- **server**-n, where *n*=1–4
- **switch**-n, where *n*=1

# deploy

**Description**

Configures the static IP address, subnet mask, gateway, and password for the root user on iDRAC for the specified server.

To use this subcommand, you must have the **Server Administrator** privilege.

**NOTE:** You can also use **setniccfg** to configure static IP address, subnet mask, gateway, DHCP, speed, and duplex properties.

**Synopsis**

- `racadm deploy -m <module> -u root -p <password> -s <ipaddress> <subnet> <gateway> -b <device> -o <no|yes>`
- `racadm deploy -m <module> -u root -p <password> -s -6 <ipv6Address> <prefixlen> <gateway> -b <device> -o <no|yes>`

  where <*prefixlen*> is a number between 0 and 128.
- `racadm deploy -m <module> -u root -p <password> -d [-6]`
- `racadm deploy -a -u root -p <password>`

**Input**

- **-b** <*device*> — Specifies the first boot device; must be used with `-o`.
- Use with -m <*module*> to specify for an individual server, or with -a for all servers

  Legal values: device=None, PXE, HDD, CD-DVD, vFDD, vCD-DVD, iSCSI, SD, FDD, RFS
- **-o** <*no|yes*> — Indicates if the server should boot from the device once; must be used with `-o`.

  Use with `-m <module>` to specify for an individual server, or with `-a` for all servers
- **-a** — Creates and enables an iDRAC root user if it does not already exist, and is executed on all the existing servers in the chassis
- **-u root** — Indicates that the <*password*> is supplied for the root user on the server. root is a constant parameter, the only value that is valid with the `-u` option.
- **-m** <*module*> — Specifies the server you want to configure.

  Legal value**s**: server-n where *n*=1–4
- **-p** <*password*> — Specifies the password for the root user on the server.
- **-s** <*ipaddress subnet gateway*> — Sets the IP address, subnet mask, and gateway for the specified server, separated by single spaces.
  - ipaddress — A string representing a valid IP address. For example, 192.168.0.20.
  - subnet — A string representing a valid subnet mask. For example, 255.255.255.0.
  - gateway — A string representing a valid gateway address. For example, 192.168.0.1.
- **-d** — Enables DHCP for the specified server.

  The **-s** and **-d** options cannot be used together in the same command.
- **-6** — Enables IPv6 auto configuration (when used with -d.) Sets static IPv6 addresses (when used with -s).

**Output**

None

**Example**

- `racadm deploy -m server-8 -s 192.168.0.20 255.255.255.0 192.168.0.1`

  The server was deployed successfully.

  The deploy command generates an error when used on the extension slot of a multi-slot server.
- `racadm deploy -m server-9 192.168.0.11 255.255.255.0 192.168.0.1`

  ERROR: Server in slot 9 is an extension of the server in slot 1.

- `rracadm deploy -m server-7 -u root -p calvin -s -6 ::/64 :: 10`

# Displayable Characters

Displayable characters include the following set:

```
abcdefghijklmnopqrstuvwxwz
ABCDEFGHIJKLMNOPQRSTUVWXYZ
0123456789~`!@#$%^&*()_+-={}[]|\:";'<>,.?/
```

# eventfilters

**Description**

Gets, sets, and displays the list of event filter settings.

To use this subcommand with the **get** option, you must have the **CMC Login User** privilege.

**Synopsis**

```
racadm eventfilters <eventfilters command type>
```

```
racadm eventfilters get -c <alert descriptor>
```

```
racadm eventfilters set -c <alert descriptor>-n
<notifications>
```

```
racadm eventfilters set -c <alert descriptor>-r
<recurrence>
```

**NOTE:** The general format of an alert descriptor:

```
cmc.alert.category.[subcategory].[severity]
```

where, category is mandatory, but subcategory and severity are optional. A severity cannot precede a subcategory.

Valid category values are:

- System
- Config
- Updates
- Storage
- Audit

Valid severity values are:

- Critical
- Warning
- Informational

Valid examples of alert descriptors are:

- `cmc.alert.all`
- `cmc.alert.audit`
- `cmc.alert.audit.lic`
- `cmc.alert.audit.warning`
- `cmc.alert.audit.lic.critical`

**Input**

- **get** - Displays the list of event filter settings.
- **set** - Configures the actions and notifications for a given event filter configuration.
- **-c** - Alert descriptor of the specific event filter.
- **-n** - The notification to be sent when the event occurs. Valid values are all, snmp, ipmi, lcd, email, or none. You can append multiple notifications separated by a comma. You cannot enter the values **all** or **none** with other notifications.
- **-r** - Event generation interval. This is applicable only to the temperature statistics subcategory **- tmps**. You can use this option as a stand-alone or with **-n** .

**NOTE:** If both **event generation interval** and **notifications** are configured and there is an error while configuring the notifications, the event generation interval is not set. The valid values are from 0–365. 0 disables the event generation.

**Example**

- Display all available event filter configurations:

```
racadm eventfilters get -c cmc.alert.all
```

- Display eventfilter configurations for a specific category. For example, audit:

```
racadm eventfilters get -c cmc.alert.audit
```

- Display eventfilter configurations for a specific subcategory. For example, licensing under the audit category:

```
racadm eventfilters get -c cmc.alert.audit.lic
```

- Display eventfilter configurations for a specific severity. For example, warning under the audit category:

```
racadm eventfilters get -c cmc.alert.audit.warning
```

- Display eventfilter configurations for a specific severity and subcategory. For example, a severity of warning in the subcategory licensing under audit category:

```
racadm eventfilters get -c cmc.alert.audit.lic.warning
```

- Clear all available alert settings:

```
racadm eventfilters set -c cmc.alert.all -n none
```

- Configure using severity as a parameter. For example, all informational events in storage category are assigned poweroff as action, and email and snmp as notifications:

```
racadm eventfilters set -c cmc.alert.storage.info -n
email,snmp
```

- Configure using subcategory as a parameter. For example, all configurations under the licensing subcategory in the audit category are assigned poweroff as action and all notifications are enabled:

```
racadm eventfilters set -c cmc.alert.audit.lic -n all
```

- Configure using subcategory and severity as parameters. For example, all Information events under the licensing subcategory in the audit category are assigned poweroff as action and all notifications are disabled:

```
  racadm eventfilters set -c cmc.alert.audit.lic.info -
n none
```

- Configure the event generation interval for temperature statistics:

```
racadm eventfilters set -c
cmc.alert.system.tmps.warning -r 10
```

- Configure the event generation interval and notifications for temperature statistics:

```
racadm eventfilters set -c cmc.alert.system.tmps -r 5 -
n snmp
```

# fanoffset

**Description**

Configures the internal fans to run at a higher speed than the normal speed.

To use this subcommand, you must have the **Chassis Configuration Administrator** privilege.

**Synopsis**

```
racadm fanoffset [-s <off|low|medium|high>
```

Valid category values are:

- off
- low
- medium
- high

**Input**

**s** — Sets the fan speed.

**Example**

- Disable the fanoffset feature.
  ```
  racadm fanoffset -s off
  ```
- Increases fan speed by 20% of fan's maximum speed. Minimum speed for fan is 35% of the maximum.
  ```
  racadm fanoffset -s low
  ```
- Increases fan speed by 50% of fan's maximum speed. Minimum speed for fan is 65% of the maximum.
  ```
  racadm fanoffset -s medium
  ```
- Sets fans to run at 100% of fan's maximum speed.
  ```
  racadm fanoffset -s high
  ```

# feature

**Description**

Displays all active chassis features. The information displayed includes feature name, date activated, and the serial number of the SD card used to activate the feature.

Dell Feature Cards may contain more than one feature.

**NOTE:** To use this subcommand to deactivate FlexAddress or ExtendedStorage, you must have the **Chassis Configuration Administrator** privilege. A user with login privileges can view status only.

**NOTE:** To deactivate FlexAddress features, the chassis must be turned off.

**Synopsis**

- `racadm feature -s`
- `racadm feature -d -c <featurename>`
- `racadm feature -r -c ExtendedStorage`

**Input**

- `-s — Displays the status of active features.`
- `-d — Deactivates the feature specified in -c option.`

**NOTE:** When the FlexAddress and FlexAddressPlus features are active, deactivating one of them results in deactivation of the other feature also. However, ExtendedStorage is not affected by the deactivation of FlexAddress or FlexAddresPlus.

- `-r — Repair damaged/unformatted ExtendedStorage media.`

**NOTE:** The –r switch requires that the ExtendedStorage feature be deactivated.

**CAUTION: Using the -r switch reformats the SD media in the active CMC cardslot. Any existing ExtendedStorage data will be lost.**

- `-c — <featurename> must be one of the following:`
- `flexaddress (with -d)`
- `flexaddressplus (with -d) ExtendedStorage (with -d or -r)`

# featurecard

**Description**

Verifies proper SD card installation and displays the SD card status.

To use this subcommand, you must have the **Chassis Configuration Administrator** privilege.

**Synopsis**

```
racadm featurecard -s
```

**Input**

**-s** — Lists active SD card features and SD card status.

**Output**

An example of output is given here.

```
racadm featurecard -s

Active CMC: The feature card inserted
is valid, serial number =
CN0H871T137401112222A00 The feature
card contains the following feature(s):
FlexAddress: bound
FlexAddressPlus: bound
ExtendedStorage: bound

Standby CMC: The feature card contains
the following feature(s):
FlexAddress: not bound
FlexAddressPlus: not bound
ExtendedStorage: bound
```

# fwupdate

**Description**

Allows you to update the firmware on the active and standby CMC firmware, chassis infrastructure firmware, and storage component firmware (RAID controller, hard disk drive, and expander). You can:

- Check the firmware update process status.
- Update the firmware from a FTP or a TFTP server by providing an IP address and optional path.
- Update the firmware from the local file system using remote RACADM.
- The subcommand updates one or more devices of a single type at a time.

To use this subcommand, you must have the **Chassis Configuration Administrator** privilege.

**NOTE:** Running the subcommand to update the active CMC firmware resets the CMC, causing all network connections to get logged off. While updating all other modules, including the standby CMC, the active CMC continues to function normally without resetting.

**NOTE:** The subcommand generates an error, when used on the extension slot of a multi-slot server.

**Synopsis**

- Using Remote RACADM:

  ```
  racadm fwupdate -p -u -d <firmware image>
  ```

  **NOTE:** iDRAC7 targets are not supported from CMC. Use the CMC GUI to update iDRAC7 targets from CMC.

  When using FTP, if you provide the full path to the image file on the CLI, then the CMC uses that path to locate that file on the host. If you do not provide a full path, then the CMC searches the home directory of the specified user for the file if the host system is running Linux or another variant of UNIX. If the host system is running Windows, then a default folder, such as **C:\ftproot** is searched.

  **NOTE:** While performing firmware update using the `racadm fwupdate` command, if the number of characters in the firmware image path is greater than 256 characters, Remote RACADM session logs off with the error message `ERROR: Specified path is too long`.

**Input**

**NOTE:** Firmware update from local RACADM (using the **-p, -u, or -d** options) is not supported on Linux operating system.

- **-p** — The -p option is used to update the firmware file from the client. The **-u** option must be used with the **-p** option.
- **-f** — The FTP is used to download the firmware.
- **-g** — For CMC, the firmware is downloaded using the TFTP server.
- **-u** — The firmware update operation is performed.
- **-a** — Specifies the TFTP server IP address or FQDN used for the firmware image (used with -g).

  **NOTE:** CMC accepts IPv4, IPv6, or fully qualified domain names (FQDN) for both FTP and TFTP servers.
- **-d** — Specifies the source path where the firmware image is stored.

  **NOTE:** The default source path is local Default: Designated TFTP default directory on that host for the file if **-g** option is absent. If **-g** is used, it defaults to a directory configured on the TFTP server.
- **-o** — Turns off the servers to perform an update.
- **-m** <*module*>—

  Specifies the module or device to be updated. <*module*> is one of the following values:

  **NOTE:** You can also specify multiple modules: *–m <module 1> –m <module 2>*, and so on.

  – cmc-active (default)
  – cmc-standby
  – iominf-n, where n = 1

    **NOTE:** You can specify the **cmc-active** and **cmc-standby** modules at the same time along with one or more server-n modules. This enables the devices to be updated together.
  – main-board

- perc-fqdd, where fqdd is FQDD of the PERC
- expander-fqdd, where fqdd is FQDD of the Storage Expander
- hdd-fqdd, where fqdd is FQDD of the HDD

- **-s** — Displays the current status of the firmware update.

  **NOTE:** Use -m to display the status of the module update. Omit -m to display the status of the active CMC update.

  **NOTE:** Use all to get the status of all the targets that must be updated.

- **-c** — Cancels the current firmware update of a module.

**Output** Displays a message indicating the operation that is being performed.

**Example**

**NOTE:** The following commands specifically apply to an active-CMC update.

- Upload a firmware image from the client and start firmware update:

  ```
  racadm fwupdate -p -u -d firmimg.cmc
  ```

- Upload the firmware image from the TFTP server and start the firmware update:

  ```
  racadm fwupdate -g -u -a 192.168.0.100 -d firmimg.cmc -m cmc-active

  TFTP firmwareate has been initiated. This update process may take several minutes to complete.
  ```

- Upload the firmware image from the FTP server and start the firmware update.

  ```
  racadm fwupdate -f 192.168.0.100 fred password123 -d firmimg.cmc -m cmc-active
  ```

- Start IOM infrastructure firmware update.

  ```
  racadm fwupdate -u -m iominf-1
  ```

- Update firmware on both the CMCs.

  ```
  racadm fwupdate -g -u -a 192.168.0.100 -d firmimg.cmc -m cmc-active -m cmc-standby
  ```

The following table describes the firmware update methods supported for each interface.

| FW Update Method | CMC |
|---|---|
| Local RACADM | No |
| Local RACADM - TFTP | No |
| Local RACADM - FTP | No |
| Remote RACADM | Yes |
| Remote RACADM-TFTP | Yes |
| Remote RACADM-FTP | Yes |
| Firmware RACADM-TFTP | Yes |
| Firmware RACADM-FTP | Yes |

# get

**Description** Saves CMC Event Filter configuration to a file.

**NOTE:** Currently, these commands are supported only in remote racadm.

**Synopsis**

```
racadm get -f <filename>
```

**Input**

–f : save event filter configurations to a file.

**Example**

–Save event filter configurations to a file by using remote racadm.

```
racadm -r 10.94.161.119 -u root -p calvin get -f config.txt
```

# getactiveerrors

**Description**

Displays the active errors in a chassis.
To run this subcommand, you must have the **CMC Login User** privilege.

**Synopsis**

```
racadm getactiveerrors [-s <severity> ] [-m <module>]
```

**Input**

valid values for <severity>: critical, warning, info
valid values for <module>: server-n, where n = 1 to 4
switch-n, where n = 1
cmc-n, where n = 1, 2
fan-n, where n = 1 to 6
ps-n, where n = 1 to 4
chassis
kvm

**Output**

Display entire log:

```
racadm getactiveerrors
```

- Display specific module log:

```
racadm getactiveerrors -m server-1
```

- Display entire informational log:

```
racadm getactiveerrors -s info
```

# getassettag

**Description**

Displays the asset tag for the chassis.
To use this subcommand, you must have the **CMC Login User** privilege.

**Synopsis**

```
racadm getassettag [-m <module>]
```

**Input**

**-m** <*module*> — Specifies the module whose asset tag you want to view.

```
Legal value: chassis
```

**Example**

- `racadm getassettag -m chassis`
- `racadm getassettag`
  `chassis 78373839-33`

# getchassisname

**Description**

Displays the name of the chassis.

To use this subcommand, you must have the **CMC Login User** privilege.

**Synopsis**

```
racadm getchassisname
```

**Example**

```
racadm getchassisname

CMC-1
```

# getconfig

**Description**

Retrieves iDRAC configuration parameters individually, or all iDRAC configuration groups may be retrieved and saved to a file.

**Synopsis**

```
racadm getconfig -f <filename>

racadm getconfig -g <groupName> [-i
<index>]

racadm getconfig -u <username>

racadm getconfig -h

racadm getconfig -g <groupName> -o
<objectName>
[-i index]
```

**Input**

- **-f** — The **-f** *<filename>* option directs getconfig to write the entire iDRAC configuration to a configuration file. This file can be used for batch configuration operations using the **config** subcommand.
- **-g** — The **-g** *<groupName>*, or group option, can be used to display the configuration for a single group. The **groupName** is the name for the group used in the **racadm.cfg** files. If the group is an indexed group, use the **-i** option.
- **-h** — The **-h**, or **help** option, displays a list of all available configuration groups in alphabetical order. This option is useful when you do not have exact group names.
- **-i** — The -i *<index>*, or **index** option, is valid only for indexed groups and can be used to specify a unique group. The *<index>*is a decimal integer from 1 through n, where n can vary from 1 to maximum number of indexes a particular group supports. If **-i** *<index>* is not specified, a value of 1 is assumed for groups, which are tables that have multiple entries. The index is specified by the index value, not a *named* value.
- **-o** — The -o *<objectname>* or **object** option specifies the object name that is used in the query. This option is optional and can be used with the **-g** option.
- **-u** — The -u *<username>*, or **user name** option, can be used to display the configuration for the specified user. The *<username>* option is the login name for the user.

- **-v** — The **-v** option displays additional details with the display of the properties and is used with the **-g** option.

**Output**

This subcommand generates error output upon encountering either of the following:

- Invalid syntax, group name, object name, index, or other invalid database members
- RACADM CLI transport failures

If errors are not encountered, this subcommand displays the contents of the specified configuration.

**Example**

- Displays all of the configuration properties (objects) that are contained in the group **cfgLanNetworking**.
  ```
  racadm getconfig -g cfgLanNetworking
  ```
- Saves all group configuration objects from iDRAC to **myrac.cfg**.
  ```
  racadm getconfig -f myrac.cfg
  ```
- Displays a list of the available configuration groups on iDRAC in an alphabetical order.
  ```
  racadm getconfig -h
  ```
- Displays the configuration properties for the user named **root**.
  ```
  racadm getconfig -u root
  ```
- Displays the user group instance at index 2 with verbose information for the property values.
  ```
  racadm getconfig -g cfgUserAdmin -i
  2 -v
  ```

# getdcinfo

**Description**

Displays general I/O module and daughter card configuration information. Only the CMC controls daughtercards.

To use this subcommand, you must have the **CMC Login User** privilege.

**NOTE:** Fabric verification for server DCs is performed only when the chassis is turned on. When the chassis is on stand-by power, iDRACs on the server modules remain turned off and thus are unable to report the server's DC fabric type. The DC fabric type may not be reported in the CMC user interface until iDRAC on the server is turned on.

**Synopsis**

```
racadm getdcinfo
```

**Input**

**-n** — Displays the model names for the daughter cards in servers.

**Example**

The following example is for a system with multi-slot servers.

```
racadm getdcinfo

Group A I/O Type : Gigabit Ethernet

Group B I/O Type : PCIe

Group C I/O Type : PCIe
```

| <IO#> | <Type> | <State> | <Role> |
|---|---|---|---|
| switch-1 | Gigabit Ethernet | OK | Master |

| **<Server#>** | **<Presence>** | **<DC1 Type>** | **<DC1 State>** | **<DC2 Type>** | **<DC2 State>** |
|---|---|---|---|---|---|
| server-1 | Present | PCIe | OK | PCIe | OK |
| server-2 | Not Present | None | N/A | None | N/A |
| server-3 | Present | PCIe | OK | None | N/A |
| server-4 | Not Present | None | N/A | None | N/A |

getdcinfo -n

| <Server#> | <Presence> | <DC1 Model Name> | <DC2 Model Name> |
|---|---|---|---|
| server-1 | Present | None | None |
| server-2 | Not Present | None | None |
| server-3 | Not Present | None | None |
| server-4 | Present | None | Broadcom M5708t |

# getflexaddr

**Description**

Displays enabled or disabled status for the entire chassis. If used with -i, the command displays MACs/WWN on a per-slot–basis.

To use this subcommand, you must have **CMC Login User** privilege.

**NOTE:** If FlexAddress is not activated on the chassis, the command displays server-assigned MAC/WWN addresses. If the slot is empty, the command leaves the server-assigned MAC/WWN addresses blank. If an external console controls the MAC/WWN addresses, the command displays an externally managed message.

**Synopsis**

racadm getflexaddr [-i <*slotNum*>]

**Input**

-i <*slotNum*> — Specifies the slot information to be displayed. <*slotNum*> must be from 1 to 4.

**Example**

Display current FlexAddress settings for all the slots and fabrics.

```
racadm getflexaddr
```

```
<Slot#>                 <Status>                  <Server Presence>

1                       Enabled                   Present

2                       Enabled                   Present

3                       Enabled                   Not Present

4                       Enabled                   Not Present
```

```
idrac System Disabled
```

Display the current FlexAddress setting for slot 1.

```
racadm getflexaddr -i 1
Slot-1 server presence = Present
Slot-1 flexaddress enabled = 1
```

```
<Fabric>          <Type>              <Server-Assigned>    <Chassis-Assigned>

slot1-A1          Gigabit Ethernet    00:1C:               00:1E:C9:FF:E3:21
                                      23:CD:AC:D2(active)

                  iSCSI               00:1C:               00:1E:C9:FF:E3:22
                                      23:CD:AC:D3(active)
```

# getioinfo

**Description** Displays general information about the I/O modules on the chassis.
To use this subcommand, you must have the **CMC Login User** privilege.

**NOTE:** The fabric type may be any supported I/O fabric type, such as Ethernet, Fiber Channel, and Infiniband.

**Synopsis**

```
racadm getioinfo
```

**Example**

```
racadm getioinfo
```

```
<IO>       <Name>      <Type>      <Presence>  <POST>      <Power>     <Role>

switch-1   Dell        Gigabit     Present     OK          ON          Master
           Ethernet    Ethernet
           Passthroug
           h
```

# getled

**Description** Displays the LED settings on a module: blinking, not blinking, or unknown (for empty slots).
To use this subcommand, you must have the **Login User** privilege.

**Synopsis**

```
racadm getled -m <module>
```

**Input**

CMC only options:

-m <*module*> — Specifies the module whose LED settings you want to view.

<*module*> can be one of the following:

- server-n where n=1–4
- switch-n where n=1
- chassis
- cmc-active

**Example**

For CMC:

- `racadm getled -m server-10`
  <*module*> <*LED state*> server-10 Blinking
- `racadm getled -m chassis`
  <*module*> <*LED state*> server-10 Not blinking
- `racadm getled -m server-1`
  <*module*> <*LED state*> server-1 ON
- `racadm getled -m server-9`
  <*module*> <*LED state*> server-9 Extension(1)

# getmacaddress

**Description**

Displays the MAC/WWN addresses for all modules or for a specified module.

To use this subcommand, you must have the **CMC Login User** privilege.

**Synopsis**

- `racadm getmacaddress [-m <module>] [-t iscsi] [-x]`
- `racadm getmacaddress [-a]`

**Input**

- **-m** <*module*> — Specifies the module whose MAC address you want to view.
  <*module*> may be one of the following:
  `server-n`, where *n*=1–4
  `switch-n`, where *n*=1
- **-t** — Displays the iSCSI MAC addresses for all servers or the specified server if used with -m option.
- **-x** — Displays the extra MACs (Ethernet or iSCSI) for servers with additional LOM MACs and must be used with -m option.
- **-a** — Displays the Ethernet and iSCSI MAC/WWN addresses for all iDRAC/LOMs/mezzanine cards. When FlexAddress is enabled for a particular slot, then the chassis-assigned MAC/WWN address is displayed.

**Example**

Display iSCSI MAC addresses for all servers.

```
racadm getmacaddress -t iscsi
```

Display iSCSI MAC for server-1.

```
racadm getmacaddress -m server-1 -t iscsi
```

Display extra iSCSI MACs for server-1 (if available).

```
racadm getmacaddress -m server-1 -t iscsi -x
```

Display MAC for server-1.

```
racadm getmacaddress -m server-1
```

| *<Name>* | *<Presence>* | *<BMC MAC Address>* | *<NIC1 MAC Address>* | *<NIC2 MAC Address>* |
|---|---|---|---|---|
| server-1 | Present | 00:11:43:FD:B7:2A | 00:11:43:FD:B7:2A | 00:11:43:FD:B7:2B |
| server-4 | Extension(1) | N/A | 00:11:43:FD:B7:2C | 00:11:43:FD:B7:2D |

Display extra MACs for server-1 (if available).

```
racadm getmacaddress -m server-1 -x
```

| *<Name>* | *<Presence>* | *<BMC MAC Address>* | *<NIC1 MAC Address>* | *<NIC2 MAC Address>* |
|---|---|---|---|---|
| server-1 | Present | 00:11:43:FD:B7:2A | 00:11:43:FD:B7:2A | 00:11:43:FD:B7:2B |
| | | | 00:11:43:FD:B7:2C | 00:11:43:FD:B7:2D |

```
racadm getmacaddress
```

| *<Name>* | *<Presence>* | *<BMC MAC Address>* | *<NIC1 MAC Address>* | *<NIC2 MAC Address>* |
|---|---|---|---|---|
| CMC | Present | N/A | 00:1E:4F:1F:3C:58 | N/A |
| Server-1 | Present | 00:1E:4F:2A:AF:7B | 00:1E:4F:2A:D3:97 | 00:1E:4F:2A:D3:99 |
| Server-2 | Present | 00:22:19:D2:1E:84 | N/A | N/A |
| Server-3 | Not Present | N/A | N/A | N/A |
| Server-4 | Present | 00:18:8B:FF:45:2A | 00:18:8B:FF:AA:02 | 00:18:8B:FF:AA:04 |
| Switch-1 | Present | N/A | 00:00:00:00:00:00 | N/A |

Display Ethernet and iSCSI MACS of all LOMs/mezzanine cards.

```
racadm getmacaddress -a
```

| *<Name>* | *<Type>* | *<Presence>* | *<BMC MAC Address>* | *<NIC1 MAC Address>* | *<NIC2 MAC Address>* |
|---|---|---|---|---|---|
| CMC | N/A | Present | N/A | 00:1E:4F:1F:3C:58 | N/A |

```
Server-1-A   Gigabit      Present      00:1E:4F:     00:1E:4F:     00:1E:4F:
             Ethernet                  2A:AF:7B      2A:D3:97      2A:D3:99

             iSCSI        Present                    00:1E:4F:     00:1E:4F:
                                                     2A:D3:98      2A:D3:9A

Server-1-B   Gigabit      Present                    Not           Not
             Ethernet                                Installed     Installed

             iSCSI        Present                    Not           Not
                                                     Installed     Installed

Server-1-C   Fibre        Present                    Not           Not
             Channel 4                               Installed     Installed

Server-2-A   Gigabit      Present      00:22:19:D2:  N/A           N/A
             Ethernet                  1E:84

             iSCSI        Present                    N/A           N/A

Server-2-B   Gigabit      Present                    Not           Not
             Ethernet                                Installed     Installed

             iSCSI        Present                    Not           Not
                                                     Installed     Installed

Server-2-C   Fibre        Present                    Not           Not
             Channel 4                               Installed     Installed

Server-3     N/A          Not Present  N/A           N/A           N/A

Server-4-A   Gigabit      Present      00:18:8B:FF:  00:18:8B:FF:  00:18:8B:FF:
             Ethernet                  45:2A         AA:02         AA:04

             iSCSI        Present                    00:18:8B:FF:  00:18:8B:FF:
                                                     AA:03         AA:05

Server-4-B   Gigabit      Not Present                Not           Not
             Ethernet                                Installed     Installed

             iSCSI        Present                    Not           Not
                                                     Installed     Installed

Server-4-C   Fibre        Present                    Not           Not
             Channel 4                               Installed     Installed

Switch-1     None         Present      N/A           00:00:00:00:  N/A
                                                     00:00
```

# getmodinfo

**Description** Displays configuration and status information for all modules or a specified module (server, switch, CMC, fan unit, blower, power supply unit, chassis, DVD, main-board, IO cable, and FPC cable) in the chassis.

To use this subcommand, you must have **CMC Login User** privilege.

**NOTE:** The service tag field is blank for modules that do not have service tags.

**Synopsis**

```
racadm getmodinfo [-m <module>] [-A]
```

**Input**

- **-m** <*module*> — Specifies the module for which the configuration and status information is required. The default command (no options) displays information about all the major components in the chassis.

  <*module*> can be one of the following values:

  - `server-n`, where n = 1 to 4
  - `switch-n`, where n = 1
  - `CMC-n`, where n = 1 or 2
  - `fan-n`, where n = 1 to 6
  - `blower-n`, where n = 1 to 4
  - `ps-n`, where n = 1 to 4
  - `chassis`
  - `dvd`
  - `main-board`
  - `io-cable`
  - `fpc-cable`
  - `storage`

- **-A** — Does not display the headers and labels in the output.

**Example**

- `racadm getmodinfo -m switch-1`
- `<module> <presence> <pwrState> <health> <svcTag> Switch-1 Present ON OK CG09074`
- `racadm getmodinfo`

  **NOTE:** A power state of "Primary" denotes Active CMC.

```
<module> <presence>  <pwrState> <health> <svcTag>
Chassis          Present          ON               OK
PLPC293

Main-Board       Present          ON               OK           N/A

Storage          Present          ON               OK
PLPC293

Fan-1            Present          ON               OK           N/A

Fan-2            Present          ON               OK           N/A

Fan-3            Present          ON               OK           N/A

Fan-4            Present          ON               OK           N/A

Fan-5            Present          ON               OK           N/A

Fan-6            Present          ON               OK           N/A

Blower-1         Present          ON               OK           N/A

Blower-2         Present          ON               OK           N/A
```

```
Blower-3        Present         ON              OK          N/A
Blower-4        Present         ON              OK          N/A
PS-1            Present         Online          N/A         N/A
PS-2            Present         Online          OK          N/A
PS-3            Not Present     N/A             N/A         N/A
PS-4            Not Present     N/A             N/A         N/A
CMC-1           Present         Standby         OK          N/A
CMC-2           Present         Primary         N/A         N/A
Switch-1        Present         ON              N/A         N/A
Server-1        Present         OFF             OKA         N/A
Server-2        Not Present     N/A             N/A         N/A
Server-3        Present         ON              N/A         N/A
Server-4        Not Present     N/A             OK          N/A
DVD             Present         ON              N/A         N/A
IO-Cable        Present         ON              OK
PLPC293
FPC-Cable       Present         ON              OK
PLPC293
```

# getniccfg

**Description**

Displays the current NIC settings.

**Synopsis**

```
racadm getniccfg
```

**Input**

```
racadm getniccfg
racadm getniccfg –m <module>
```

where –m must be one of the following values:

- `chassis`

  : default state if -m is not specified
- `server-n`

  : where n = 1 to 4
- `switch-n`

  : where n = 1

**Example**

```
racadm getniccfg
NIC Enabled = 1
```

IPv4 Enabled = 1
DHCP Enabled = 1
Static IP Address = 192.168.0.120
Static Subnet Mask = 255.255.255.0
Static Gateway = 192.168.0.1
Current IP Address = 10.36.0.12
Current Subnet Mask = 255.255.254.0
Current Gateway = 10.36.0.1
IPv6 Enabled = 0
Autoconfiguration Enabled = 1
Static IPv6 Address = ::/64
Static IPv6 Gateway = ::
Link Local Address = ::
Current IPv6 Address 1 = ::
Current IPv6 Gateway = ::
Speed = Autonegotiate
Duplex = Autonegotiate
VLAN Enable = 0
VLAN ID = 1
VLAN priority = 0

```
racadm getniccfg -m server-1
```

LOM Model Name = BRCM 10GbE 2P 57810s bNDC
LOM Fabric Type = 10 GbE KR
IPv4 Enabled = 1
DHCP Enabled = 1
IP Address = 10.35.0.159
Subnet Mask = 255.255.255.0
Gateway = 10.35.0.1
IPv6 Enabled = 0
Autoconfiguration Enabled = 0
Link local Address =
IPv6 Gateway = ::
VLAN Enable = 0
VLAN ID = 1
VLAN priority = 0

```
racadm getniccfg -m switch-1
```

DHCP Enabled = 1
IP Address = 10.35.155.223
Subnet Mask = 255.255.255.0
Gateway = 0.0.0.0

### Output

The **getniccfg** subcommand displays an appropriate error message if the operation is not successful. Otherwise, the output is displayed in the following format:

**IPv4 settings:**

```
NIC Enabled     = 1
IPv4 Enabled = 1
DHCP Enabled    = 1
IP Address      = 10.35.0.64
Subnet Mask     = 255.255.255.0
Gateway         = 10.35.0.1
```

**IPv6 settings:**

```
IPv6 Enabled       = 0
DHCP6 Enabled      = 1
IP Address 1       = ::
Gateway            = ::
Link Local Address = ::
IP Address 2       = ::
IP Address 3       = ::
IP Address 4       = ::
IP Address 5       = ::
IP Address 6       = ::
IP Address 7       = ::
IP Address 8       = ::
IP Address 9       = ::
IP Address 10      = ::
IP Address 11      = ::
IP Address 12      = ::
IP Address 13      = ::
IP Address 14      = ::
IP Address 15      = ::
```

**LOM Status:**

```
NIC Selection   = Dedicated
Link Detected   = Yes
Speed           = 10Mb/s
Duplex Mode     = Half Duplex
```

# getpbinfo

| | |
|---|---|
| **Description** | Displays power budget status information. |

To use this subcommand, you must have the **CMC Login User** privilege.

**Synopsis** `racadm getpbinfo`

**Example**

```
racadm getpbinfo

[Power Budget Status]
System Input Power                              = 333 W
Peak System Power                               = 403 W
Peak System Power Timestamp                     = 15:38:01 06/14/2013
Minimum System Power                            = 269 W
Minimum System Power Timestamp                  = 19:12:27 09/22/2000
Overall Power Health                            = OK
Redundancy                                      = Yes
System Input Power Cap                          = 5000 W
Redundancy Policy                               = Power Supply Redundancy
Dynamic PSU Engagement Enabled                  = No
System Input Max Power Capacity                 = 2372 W
Input Redundancy Reserve                        = 1182 W
Input Power Allocated to Servers                = 327 W
Input Power Allocated to Chassis Infrastructure = 427 W
Total Input Power Available for Allocation      = 344 W
Standby Input Power Capacity                    = 0 W
Server Based Power Management Mode              = No
Max Power Conservation Mode                     = No
Server Performance Over Power Redundancy        = No


[Chassis Power Supply Status Table]
<Name>          <Presence>      <Power State>   <Input Current> <Input Volts>
<Output Rated Power>
PS1             Present         Online          1.3 A           115.5 V
1050 W
PS2             Present         Online          1.6 A           116.0 V
1050 W
PS3             Not Present     Slot Empty      N/A             N/A
N/A
PS4             Not Present     Slot Empty      N/A             N/A
N/A

[Server Module Power Allocation Table]
<Slot#> <Server Name> <Power State>   <Allocation> <Priority>       <Blade Type>
1       SLOT-01         OFF             0 W             1           PowerEdge
M620
2       SLOT-02         N/A             N/A             1           N/A
3       SLOT-03         ON              327 W           1           PowerEdge
M620
4       SLOT-04         N/A             N/A             1           N/A
```

# getpciecfg

**Description** Displays the FQDD of the PCIe slots and Virtual Adapters, and their mapping information and properties.

**NOTE:** To use this subcommand, you must have the **CMC Login User** privilege.

**Synopsis** `racadm getpciecfg [-c <FQDD>][a]`

**Input**

- **-a** — Use this option to display the assignment of PCIe slots and Virtual Adapters.

- **-c** — Use this option to select a specific PCIe adapter or Virtual Adapter.
- **FQDD** — FQDD of the selected PCIe slot or Virtual Adapter.
- **-r** — Use this option to view the ride-through configuration settings.

**Example**

- Displays FQDDs of all the PCIe slots and PCIe Virtual Adapters:

```
racadm getpciecfg

<PCIe Slot#>     <FQDD>
PCIe slot 01     PCIE.ChassisSlot.1
PCIe slot 02     PCIE.ChassisSlot.2
PCIe slot 03     PCIE.ChassisSlot.3
PCIe slot 04     PCIE.ChassisSlot.4
PCIe slot 05     PCIE.ChassisSlot.5
PCIe slot 06     PCIE.ChassisSlot.6
PCIe slot 07     PCIE.ChassisSlot.7
PCIe slot 08     PCIE.ChassisSlot.8

<PCIe Slot#>     <Virtual Adapter#>      <FQDD>
PCIe slot 09     Virtual Adapter 01      RAID.ChassisIntegrated.
1-1-1
PCIe slot 09     Virtual Adapter 02      RAID.ChassisIntegrated.
1-1-2
PCIe slot 09     Virtual Adapter 03      RAID.ChassisIntegrated.
1-1-3
PCIe slot 09     Virtual Adapter 04      RAID.ChassisIntegrated.
1-1-4

PCIe slot 10     Virtual Adapter 01      RAID.ChassisIntegrated.
2-1-1
PCIe slot 10     Virtual Adapter 02      RAID.ChassisIntegrated.
2-1-2
PCIe slot 10     Virtual Adapter 03      RAID.ChassisIntegrated.
2-1-3
PCIe slot 10     Virtual Adapter 04      RAID.ChassisIntegrated.
2-1-4
```

- Displays the assignment of PCIe slots and vitual adapters:

```
racadm getpciecfg -a
<PCIe
Slot#> <Name>        <Power State> <Server Slot Name> <Server
Slot#> <Server Presence>
1       Empty                  N/A           Unmapped           N/
A                             N/A
2       QLogic Corp  OFF           Unmapped           N/
A                             N/A
3       Empty        N/A           Unmapped           N/
A                             N/A
4       Empty        N/A           Unmapped           N/
A                             N/A
5       Empty        N/A           Unmapped           N/
A                             N/A
6       Empty               N/A           Unmapped           N/
A                             N/A
7       Empty               N/A           Unmapped           N/
A                             N/A
8       Empty        N/A           Unmapped           N/
A                             N/A


<PCIe Slot#> <Virtual Adapter#> <Server Slot Name> <Server
```

```
Slot#> <Server Presence>
9            1                  SLOT-01
1                              Present
9            2                  SLOT-02
2                              Not Present
9            3                  SLOT-03
3                              Present
9            4                  Unmapped           N/
A                         N/A

10           1                  SLOT-01
1                              Present
10           2                  SLOT-02
2                              Not Present
10           3                  SLOT-03
3                              Present
10           4                  Unmapped           N/
A                         N/A
```

- Displays the properties of a PCIe slot selected using FQDD:

  ```
  racadm getpciecfg -c pcie.chassisslot.1
  ```

- Displays the properties of a Virtual Adapter selected using FQDD:

  ```
  racadm getpciecfg -c RAID.ChassisIntegrated.2-1-4
  ```

- Displays the ride-through properties of the system

  ```
  racadm getpciecfg -r

  Ride-through mode is enabled
  Ride-through timeout 1800 secs
  ```

# getpminfo

**Description**

Displays power management status information.

To use this subcommand, you must have **CMC Login User** privilege.

**Synopsis**

```
racadm getpminfo
```

**Example**

```
racadm getpminfo

[Real-Time Power Statistics]
System Input Power              = 600
W (188 BTU/hr)
Peak System Power               = 600
W (188 BTU/hr
Peak System Power Start Time    =
16:02:10 01/16/2008
Peak System Power Timestamp     =
06:32:55 01/26/2009
Minimum System Power            = 400
W (177 BTU/hr)
Minimum System Power Start Time =
22:43:21 01/21/2008
Minimum System Power Timestamp  =
06:32:55 01/26/2009
System Idle Power               = 68 W
(188 BTU/hr)
System Potential Power          = 68 W
(188 BTU/hr)
```

```
System Input Current Reading    = 31.2
A

[Real-Time Energy Statistics]
System Energy
Consumption              = 6.4 kWh
System Energy Consumption Start
Time    = 16:02:10 01/16/2008
System Energy Consumption
Timestamp     = 16:02:10 01/16/2008

[System Power Status]
Chassis Power State
= ON
Overall Power Health = OK
Redundancy = No

[System Power Policy Configuration]
System Input Power
Cap                   = 7928 W (7928
BTU/hr |
10%)
Surplus for Peak
Performance            = 7000 W (6130
BTU/hr)
Redundancy Policy
= None
Dynamic PSU Engagement Enabled
= No

[Power Budgeting]
System Input Max Power
Capacity                 = 0 W
Input Redundancy
Reserve                       = 0 W
Input Power Allocated to
Servers                = 0 W
Input Power Allocated to Chassis
Infrastructure = 51W
Total Input Power Available for
Allocation = 0 W
Standby Input Power
Capacity                    = 0 W
```

# getraclog

**Description** The `getraclog` command displays RAC log entries.

**Synopsis** `racadm getraclog [-s <start>] [-c <count>]`

**Input**

**NOTE:** If no options are provided, the entire log is displayed.

- **-c** — Specifies the number of records to display.
- **-s** — Specifies the starting record used for the display.
- **--more** — Displays one screen at a time and prompts the user to continue.

**Output**

The default output display shows the record number, message ID, category, agent ID, severity, time stamp, message arg, and message. The timestamp begins at midnight, January 1, and increases until the system restarts. After the system restarts, the system's timestamp is used.

```
SeqNumber           = 4
Message ID          = CMC8550
Category            = Audit
AgentID             = CMC
Severity            = Information
Timestamp           = 1982-03-21 05:33:35
Message Arg   1     = Healthy
Message             = Chassis health is Healthy
```

**Example**

- Displays all the logs.
  `racadm getraclog`
- Displays 3 records from record number 5:
  `racadm getraclog -s 5 -c 3`

# getractime

**Description**

Displays the current iDRAC time.

**Synopsis**

- `racadm getractime [-d]`
- `racadm getractime [-d][-z]`
- `racadm getractime [-n]`

**Input**

- **-d** — Displays the time in the format, yyyymmddhhmmss.mmmmmms.
- **-z** — Displays timezone. This option is specific to CMC only.
- **-n** — Displays NTP peer information. This option is specific to CMC only.

**NOTE:** If no options are provided, the getractime subcommand displays the time in a common readable format.

**Output**

The current iDRAC time is displayed.

**Example**

- `racadm getractime`
  Thu Dec 8 20:15:26 2005
- `racadm getractime -d`
  20051208201542.000000

# getredundancymode

**Description**

Displays the redundancy status (Redundant or Non-Redundant) of the CMC.

To use this subcommand, you must have **CMC Login User** privilege.

**Synopsis**

`racadm getredundancymode`

**Example**

```
racadm getredundancymode

Redundant
```

# getsel

**Description** Displays all sensor event log entries in the DRAC.

**Synopsis**

- racadm getsel -i [-A]
- racadm getsel [-s <*start*>] [-c <*count*>] [-A] [-o] [-E] [-R] [--more]

If no arguments are specified, the entire log is displayed.

**Input**

- **-A** — Specifies output with no display headers or labels.
- **-c** — Provides the number of records to be displayed.
- **-o** — Displays each entry in the SEL in a single line.
- **-s** — Specifies the starting record used for the display.
- **-E** — Displays RAW SEL data with the other data for each entry.
- **-R** — Displays only RAW SEL data for each entry.
- **-i** — Displays the number of entries in the SEL.
- **--more** — Displays one screen at a time and prompts the user to continue (similar to the UNIX **more** command.)

**NOTE:** The -A, -E, -o, and -R options are deprecated.

**Output**

```
Record: 12

Date/Time: 11/20/2011 14:19:34

Source: system

Severity: Ok

Description: C: boot completed.
```

**Example**

```
racadm getsel
```

# getsensorinfo

**Description** Displays status of chassis sensors.

**NOTE:** To use this subcommand, you must have **CMC Login User** privilege.

**Synopsis**

```
racadm getsensorinfo
```

**Examples**

```
racadm getsensorinfo
Sensor Type  : FanSpeed
Sensor Units : rpm

 <Sensor      <Status   <Readin   <LW>   <LC>   <UW>   UC
 Name>        >         g>

 Fan-1        OK        0         840    600    N/A    N/A

 Fan-2        OK        0         840    600    N/A    N/A

 Fan-3        OK        4037      840    600    N/A    N/A
```

```
Fan-4          OK        4045      840    600    N/A     N/A

Fan-5          OK        4107      840    600    N/A     N/A

Fan-6          OK        0         840    600    N/A     N/A

Blower-1       N/A       0         3000   2250   N/A     N/A

Blower-2       N/A       0         3000   2250   N/A     N/A

Blower-3       N/A       0         3000   2250   N/A     N/A

Blower-4       N/A       2611      3000   2250   N/A     N/A

Sensor Type  : Temperature
Sensor Units : Celsius

<Sensor        <Statu   <Readin  <LW>   <LC>   <UW>    <UC>
Name>          s>       g>

Chassis        OK       22       3      -7     42      47
Ambient

Server-4       OK       20       3      -7     42      47

Sensor Type  : Power
<Sensor Name> <Status> <AC-OK status>
PS-1             Slot Empty   N/A
PS-2             Online       OK
PS-3             Slot Empty   N/A
PS-4             Slot Empty   N/A

Sensor Type  : Cable
<Sensor Name> <Status>
IO-Cable         OK
FPC-Cable        OK

Sensor Type  : Intrusion
<Sensor Name> <Intrusion>
Chassis Intrusion  Closed
```

# getslotname

**Description**

Displays the name and host name (if available) of all the four slots, or of a specified slot (indicated by the slot number) in the chassis. Optionally, use this command to find if the slot name or host name is displayed in the CMC Web interface, or with the getslotname [-i <*slotNum*> | -h] command. If the host name is not available, the static slot name is used.

To use this subcommand, you must have **CMC Login User** privilege.

**Synopsis**

- racadm getslotname
- racadm getslotname [-i <*slotNum*> | -h]
- racadm getslotname -h

**Input**

- None -
  Displays the slot name for all the four slots in the chassis.

- -i <*slotNum*> - specifies the slot number.
  Values: 1 to 4
- -h - Specifies whether to display the slot name or the host name (if available). 1 displays host names and 0 displays slot names.

**Example**

- Display all slots names.

```
racadm getslotname

<Slot #> <Slot Name>      <Host name>
   1       SLOT-01
   2       Webserver01     WXP-8GRB221
   3       Webserver3      WXP-319QWEecet5
   4       SLOT-04
```

- Display the name of the third slot.

```
racadm getslotname -i 3
```

- Verify if the option (1 is Active) for displaying host names is set.

# getssninfo

**Description**

Displays a list of users that are connected to iDRAC. The following information is displayed:

- Session ID
- Username
- IP address (if applicable)
- Session type (for example, serial or Telnet)
- Login date and time in MM/DD/YYYY HH:MM:SS format

**NOTE:** Based on the Session ID (SSNID) or the user name (User), the iDRAC administrator can close the respective sessions or all the sessions using the, closessn subcommand. For more information, see closessn.

**Synopsis**

```
racadm getssninfo [-A] [-u <username> | *]
```

**Input**

- **-A** - eliminates the printing of data headers.
- **-u** - The -u <*username*> user name option limits the printed output to only the detail session records for the given user name.

**Examples**

```
racadm getssninfo
```

| SSNID | Type | User | IP Address | Login Date/Time |
|---|---|---|---|---|
| 6 | GUI | root | 192.168.0.10 | 04/07/2010 12:00:34 |

```
racadm getssninfo -A
"root" "143.166.174.19" "Telnet" "NONE"

racadm getssninfo -A -u *
"root" "143.166.174.19" "Telnet" "NONE"

"bob" "143.166.174.19" "GUI" "NONE"
```

# getsvctag

**Description** Displays the service tag of the host system.

**Synopsis**

```
racadm getsvctag
```

**Input**

```
getsvctag
```

**Output**

```
<Module>        <ServiceTag>
Chassis         PLPC033
Switch-1        N/A
Server-1        7654321
Server-2        N/A
Server-3        Extension(1)
Server-4        PLSMS04
```

**Example**

```
racadm getsvctag
```

# getsysinfo

**Description** Displays information related to CMC and chassis.

**NOTE:** The Hostname and OS Name fields in the **getsysinfo** output display accurate information only if **Dell OpenManage Server Administrator** is installed on the managed system. Else, these fields may be blank or inaccurate. An exception to this are VMware operating system names, which are displayed even if **Server Administrator** is not installed on the managed system.

**Synopsis**

```
racadm getsysinfo [-d] [-c] [-A] [-4] [-6]
```

**Input**

- **-d** - Displays CMC information.
- **-c** - Displays chassis information.
- **-A** - Does not display headers and labels.
- **-4** - Displays IPv4 information.
- **-6** - Displays IPv6 information.

**Output**

```
CMC Information:
CMC Date/Time              = Sat Mar 27 1982 11:36
Primary CMC Location       = CMC-1
Primary CMC Version        = 1.00
Standby CMC Version        = N/A
Last Firmware Update       = Sun Mar 21 1982 05:53
Hardware Version           = X12

CMC Network Information:
NIC Enabled                = 1
MAC Address                = 78:45:C4:F7:8B:29
Register DNS CMC Name      = 1
DNS CMC Name               = cmc-servicetag
Current DNS Domain         = swtest.com
VLAN ID                    = 1
VLAN Priority              = 0
VLAN Enabled               = 0

CMC IPv4 Information:
IPv4 Enabled               = 1
```

```
Current IP Address        = 10.94.237.30
Current IP Gateway        = 10.94.237.1
Current IP Netmask        = 255.255.255.128
DHCP Enabled              = 1
Current DNS Server 1      = 10.94.175.2
Current DNS Server 2      = 0.0.0.0
DNS Servers from DHCP     = 1

CMC IPv6 Information:
IPv6 Enabled              = 0
Autoconfiguration Enabled = 1
Link Local Address        = ::
Current IPv6 Address 1    = ::
Current IPv6 Gateway      = ::
Current IPv6 DNS Server 1 = ::
Current IPv6 DNS Server 2 = ::
DNS Servers from DHCPv6   = 1

Chassis Information:
System Model              = PowerEdge VRTX
System AssetTag           = 00000
Service Tag               =
Express Service Code      =
Chassis Name              = CMC-
Chassis Location          = [UNDEFINED]
Chassis Midplane Version  = 1.0
Power Status              = ON
System ID                 = 1487
```

**Examples**

```
racadm getsysinfo -d

racadm getsysinfo -c

racadm getsysinfo -A

racadm getsysinfo -4

racadm getsysinfo -6
```

# gettracelog

**Description**

Lists all the trace log entries in iDRAC and CMC.

**Synopsis**

- `racadm gettracelog -i [-A]`
- `racadm gettracelog [-s <start>] [-c <count>] [--more] [-A] [-o]`

**Input**

- **-i** - Displays the number of entries in iDRAC trace log.
- **--more** - Displays one screen at a time and prompts the user to continue (similar to the UNIX more command).
- **-o** - Displays each entry in a single line.
- **-c** - Specifies the number of records to display.
- **-s** - Specifies the starting record to display.
- **-A** - Does not display headers or labels.

**NOTE:** The **-A** and **-o** options are deprecated.

**Output** The default output display shows the record number, timestamp, source, and description. The timestamp begins at midnight, January 1 and increases until the system boots. After the system boots, the system's timestamp is used.

**Example**

```
Record:      1

Date/Time:   Dec  8 08:21:30

Source:      ssnmgrd[175]

Description: root from 143.166.157.103: session timeout
sid 0be0aef4
```

# getversion

**Description** Displays the current firmware version of various modules in the chassis, iDRAC version on the attached servers, and whether the target device can be updated.

**NOTE:** To use this subcommand, you must have **CMC Login User** privilege.

**Synopsis**

- `racadm getversion`
- `racadm getversion [-b | -c] [-m <module>]`
- `racadm getversion -l [-m <module>] [-f <filter>]`

**Input**

**NOTE:** The -b, -c and -l options are not available for CMC modules.

**NOTE:** The **-l** option requires that the Lifecycle Controller service is enabled on the servers. For version information, see the RACADM Readme available at **dell.com/support/manuals**.

- **(none)** — Displays the version information for all targets or devices.

```
<Server>    <iDRAC Version>     <Blade Type>      <Gen>
<Updatable>
server-4    1.30.30 (Build 26)     PowerEdge M620
iDRAC7       Y

<Server>    <CMC Version>              <Updatable>
cmc-1       1.00.X23.201211271524         Y

<Chassis Infrastructure>    <FW Version>               <FQDD>
Main Board                        1.00.X08.201210242214
System.Chassis.1#Infrastructure.1


<Storage Controller>    <FW Version>                <FQDD>
PERC H710PV Mini           23.8.0-0007
RAID.ChassisIntegrated.1-1

<Storage Enclosure>    <FW Version>                <FQDD>
PL100 0:0                         0.12
Enclosure.Internal.0-0:RAID.ChassisIntegrated.1-1

<Physical Disk>         <FW Version>            <FQDD>
Physical Disk 0:0:0               ES65              Disk.Bay.
0:Enclosure.Internal.0-0:RAID.ChassisIntegrated.1-1
```

- **-b** - Displays the server's current BIOS version (default is iDRAC version).
- **-c** - Displays the server's current CPLD version.
- **-l** - Displays the firmware versions Lifecycle Controller components.
- **-f** <*filter*> - Filters the components. Must be used with **-l** and be one of the following values:

- bios: BIOS
- idrac: iDRAC
- usc: Unified Server Configurator (Lifecycle Controller)
- diag: 32-bit Diagnostics
- drivers: OS Driver Package
- nic-x: Network Interface card. See -l output for possible values of x.
- raid-x: RIAD Controller. See -l output for possible values of x.

- **-m** <*module*> - Specifies the module or device for which you must retrieve the version information.
  <*module*> is one of the following:
  - `server-n`, where n = 1 to 4. For example, cmc-2.
  - `switch-n`, where n = 1
  - `CMC-n`, where n = 1 or 2
  - `mainboard`
  - `perc`
  - `expander`
  - `hdd`
  - `perc-fqdd`, where fqdd is FQDD of the PERC.
  - `expander-fqdd`, where fqdd is FQDD of the Storage Expander.
  - `hdd-fqdd`, where fqdd is FQDD of the HDD.

**Example**

- Retrieve the version for a server 4
  ```
  racadm getversion -m server-4
  ```
- Retrieve the Lifecycle Controller component versions for servers 1 and 3:
  ```
  racadm getversion -l -m server-1 -m server-3
  ```
- Retrieve the Lifecycle Controller BIOS versions for servers 1 and 3:
  ```
  racadm getversion -l -m server-1 -m server-3 -f bios
  ```
- Retrieve the version for all modules:
  ```
  racadm getversion
  ```
- Retrieve the iDRAC version in all the servers that are attached to the chassis:
  ```
  racadm getversion -f idrac
  ```

# ifconfig

**Description**

Displays the contents of the network interface table.

To use this subcommand, you must have the **Execute Diagnostic Commands or Configure iDRAC** privilege.

**Synopsis**

```
racadm ifconfig
```

**Example**

```
$ racadm ifconfig

eth0     Link encap:Ethernet  HWaddr
00:1D:09:FF:DA:23

              inet addr:10.35.155.136
Bcast:10.35.155.255
 Mask:255.255.255.0

              UP BROADCAST RUNNING
MULTICAST  MTU:1500
Metric:1

              RX packets:2550665
errors:0 dropped:0 overruns:0
frame:0

              TX packets:0 errors:0
dropped:0 overruns:0
carrier:0

              collisions:0 txqueuelen:
1000

              RX bytes:272532097
(259.9 MiB)  TX bytes:0
(0.0 B)
```

# jobqueue

**Description**

Displays the jobs in that are currently being run, delete the jobs, and create a job.

**NOTE:** To view the jobs, you must have **CMC Login User** privilege.

**NOTE:** To delete the jobs, you must have **Chassis Configuration Administrator** privilege.

**Synopsis**

```
racadm jobqueue view

racadm jobqueue delete

racadm jobqueue create
```

**Input**

- **—i** — Specifies the JobID that is displayed or deleted.
- **– –all** — The JobIDs that are not applied are deleted.
- **<fqdd>** — Specifies an FQDD for which a job has to be created.
- **reboot type** — Specifies a reboot type. Valid options are **none: No Reboot Job** which is the default.
- **start time** — Specifies a start time for job to be scheduled in yyyymmddhhmmss format. If you specify TIME_NOW, the job is immediately run.
- **Expiration time** — Specifies the expiry time for the job to complete in yyyymmddhhmmss format. If you specify TIME_NA, the wait-time is not applicable for the job.

**Example**

- Display all the jobs:

```
------------------------JOB
QUEUE------------------------
[Job ID=RID_853106266329]
```

```
Job Name=Reboot4
Status=New
Start Time=[NOW]
Expiration Time=[NOW]
-------------------------------------------------------
--
[Job ID=RID_852218430518]
Job Name=Reboot4
Status=New
Start Time=[NOW]
Expiration Time=[NOW]
-------------------------------------------------------
--
[Job ID=RID_852215634901]
Job Name=Reboot4
Status=New
Start Time=[NOW]
Expiration Time=[NOW]
-------------------------------------------------------
--
[Job ID=JID_852215394003]
Job Name=ConfigRAID:GUI:RAID.ChassisIntegrated.1-1
Status=New
Start Time=[NOW]
Expiration Time=[NOW]
-------------------------------------------------------
--
```

- Delete the specified job:

  ```
  racadm jobqueue delete -i RID_860202993201
  ```

- Job being created to turn on the RAID controller installed in the chassis.

  ```
  racadm jobqueue create RAID.ChassisIntegrated.1-1 -r
  pwrup -s TIME_NOW -e 20120501100000
  ```

- racadm jobqueue delete -i <JobID>

# krbkeytabupload

| | |
|---|---|
| **Description** | Uploads a Kerberos keytab file.<br>To use this subcommand, you must have the **Configure iDRAC** permission. |
| **Synopsis** | `racadm krbkeytabupload [-f <filename>]`<br>`<filename> is the name of the file including the path.` |
| **Input** | **-f** — Specifies the file name of the keytab to be uploaded. If the file is not specified, the keytab file in the current directory is selected. |
| **Output** | Returns 0 when successful, and a non–zero number, when unsuccessful. |
| **Example** | `racadm krbkeytabupload -f c:\keytab \krbkeytab.tab` |

# license

**Description**

Manages the CMC licenses.

**Synopsis**

`racadm license <license command type>`. The command type can be:

- View the license using the following options:
  - `racadm license view`
  - `racadm license view [-c <component>]`
- `racadm license import [-u <username>] [-p <password>] [-f <license file name>] [-l <NFS or CIFS share>] [-c <FQDD>]`
- Export the license using the following options:
  - `racadm license export [-u <username>] [-p <password>] [-f <license file name>] [-l <NFS/CIFS share>] [–t <transaction ID>]`
  - `racadm license export [-u <username>] [-p <password>] [-f <license file name>] [-l <NFS/CIFS share>] [–e <entitlement ID>]`
  - `racadm license export [-u <username>] [-p <password>] [-f <license file name>] [-l <NFS/CIFS share>] [–c <FQDD>]`
  - `racadm license export [-u <username>] [-p <password>] [-f <license file name>] [-l <NFS/CIFS share>] [–c <FQDD>] [–e <entitlement ID>] [–t <transaction ID>]`
- Delete the license using the following options:
  - `racadm license delete [-t <transaction ID>]`
  - `racadm license delete [-e <entitlement ID>]`
  - `racadm license delete [-c <component]`
- Replace the license:

  `racadm license replace [-u <username>] [-p <password>] [-f <license file name>] [-l <NFS/CIFS share>] [–t <transaction ID>]`

**Input**

**NOTE:** License operations the <licensefile> name should be less than 56 Characters.

**NOTE:** During Remote file share, SSH/telnet supports the Import and Export options.

**NOTE:** Only a user with administrator-level privileges can use the import, export, delete, and replace commands. An Administrator privilege is not necessary to use the view command.

- **view** — View license information.
- **import** — Installs a new license.
- **export** — Exports a license file.
- **delete** — Deletes a license from the system.
- **replace** — Replaces an older license with a given license file.

Use the following options along with the commands:

- **-c** — Specifies the FQDD of the component or device, on which the license is present.
- **-l** — Network share location to import or export the license file.
- **-f** — File name of the license file.

**NOTE:** During export, the license file is named **<servicetag>_<entitlement ID>.xml**.

- **-u**— User name of the remote share.
- **-p** — Password for the remote share.
- **-e** — Specifies the entitlement ID of the license file.
- **-t** — Specifies the transaction ID of the license file.

**Examples**

- View licenses:
  - View all the license information in the chassis.

```
racadm license view

CMC.Integrated.1
        Status              = OK
        Device              = CMC.Integrated.1
        Device Description  = Chassis Management
Controller for PowerEdge VRTX
        Unique Identifier   =
                License #1
                        Status              = OK
                        Transaction ID      = 8
                        License Description = CMC
Enterprise Evaluation License

                        License Type        =
EVALUATION
                        Entitlement ID      =
A2Wir6lJ1MoP8iBAtqsEKDv8
                        Expiration          =
1982-04-07T21:00:00
```

  - Display licenses available on a specific device. For example, for RAID slot 4:

```
racadm license view -c RAID.slot.4
```

- Import a license:
  - Import a license from a CIFS share to a device (for example, Integrated CMC):

```
racadm license import -u admin -p passwd -f License.xml
-l //192.168.2.140/licshare -c cmc.integrated.1
```

  - Import a license from an NFS share to a device (for example, Integrated CMC):

```
racadm license import -f License.xml -l 192.168.2.14:/
share -c cmc.integrated.1
```

  - Import a license from the local file system using Remote RACADM:

```
racadm license import -u admin -p passwd -r
192.168.0.120 -f C:\Mylicdir\License.xml -c
cmc.integrated.1
```

- Export a license file:
  - Export license to an NFS share using transaction ID (for example, transaction 27).

```
racadm license export -f License.xml -l 192.168.2.140:/
licshare -t 27
```

  - Export the license to a CIFS share specifying the entitlement ID (for example, abcdxyz):

```
racadm license export -u admin -p passwd -f License.xml
-l //192.168.2.140/licshare -e abcdxyz
```

  - Export license to a CIFS share specifying the FQDD. While using the -c option and exporting licenses from a device, more than one license file must be exported.

Therefore, if a file name is provided, an index is appended to the end of the file name such as LicenseFile**0**.xml, LicenseFile**1**.xml, and so on. In this case, the device is an embedded CMC:

```
racadm license export -u root -p calvin -f
LicenseFile.xml  -l //192.168.2.140/licshare -c
cmc.embedded.1
```

- Delete a license:
  - Delete licenses on a particular device. For example. Embedded CMC:

    ```
    racadm license delete -c cmc.embedded.1
    ```
  - Delete license using an entitlement ID. For example, xYZabcdefg

    ```
    racadm license delete -e xYZabcdefg
    ```
  - Delete license using a transaction ID. For example, 2.

    ```
    racadm license delete -t 2
    ```
- Replace a license.
  - Replace the license on a device with a license file that is located on an NFS share, and using a transaction ID. For example, transaction 27.

    ```
    racadm license replace -f License.xml -l 192.168.2.140:/
    licshare -t 27
    ```
  - Replace license on a device with a license file that is located on a CIFS share and using a transaction ID. For example, transaction 27.

    ```
    racadm license replace -u admin -p passwd -f
    License.xml -l //192.168.2.140/licshare -t 27
    ```
  - Replace license on a device with a license file on the local file system.

    ```
    racadm license replace -f License.xml -t 27
    ```

# netstat

**Description**

Displays the routing table and the current connections.

To use this subcommand, you must have the **Execute Diagnostic Commands** privilege.

**Synopsis**

```
racadm netstat
```

**Input**

```
racadm netstat
```

**Output**

```
Kernel IPv6 routing table
Destination
     Next
Hop
Flags Metric Ref    Use Iface
::
1/128
   ::
    U     0      30       1 lo
fe80::200:ff:fe00:d01/128
     ::
      U     0      0        1 lo
fe80::/64
     ::
      U     256    0        0 eth1
ff00::/8
     ::
```

```
      U     256    0        0 eth1


Kernel IP routing table
Destination     Gateway
Genmask         Flags   MSS Window
irtt Iface
10.94.161.0     0.0.0.0
255.255.255.0   U         0 0
0 bond0
0.0.0.0         10.94.161.1
0.0.0.0         UG        0 0
0 bond0


Active Internet connections (w/o
servers)
Proto Recv-Q Send-Q Local
Address           Foreign
Address         State
tcp        0      0
127.0.0.1:8195
127.0.0.1:52887         ESTABLISHED
tcp        0      0
127.0.0.1:199
127.0.0.1:52174         ESTABLISHED
tcp        0      0
127.0.0.1:52175
127.0.0.1:199           ESTABLISHED
tcp        0      0
127.0.0.1:199
127.0.0.1:52175         ESTABLISHED
tcp        0      0
10.94.161.120:22
10.94.115.237:45106     ESTABLISHED
tcp        0      0
127.0.0.1:52174
127.0.0.1:199           ESTABLISHED
tcp        0      0
127.0.0.1:52887
127.0.0.1:8195          ESTABLISHED
```

# ping

**Description**

Verifies that the destination IP4address is reachable from iDRAC with the current routing-table contents. A destination IP4address is required. An ICMP echo packet is sent to the destination IP address based on the current routing-table contents.

To use this subcommand for CMC, you must have the Administrator privilege for CMC, and for iDRAC you must have the Execute Diagnostic Commands privilege.

**Synopsis**

```
racadm ping <ip4address>
```

# ping6

**Description**

Verifies that the destination IPv6 address is reachable from an iDRAC or CMC, or with the current routing-table contents. A destination IPv6 address is required. An ICMP

echo packet is sent to the destination IPv6 address on the basis of current routing-table contents.

To use this subcommand for CMC, you must have the Administrator privilege.

**Synopsis**

```
racadm ping6 <ipv6address>
```

**Example**

```
racadm iping6 10.9.72.254

IPING6 10.9.72.254 (10.9.72.254): 56
data bytes

64 bytes from 10.9.72.254: icmp_seq=0
ttl=121 time=2.9
ms


--- 10.9.72.254 ping statistics ---

1 packets transmitted, 1 packets
received, 0 percent
packet loss

round-trip min/avg/max = 2.9/2.9/2.9 ms
```

# racdump

**Description**

This subcommand displays the comprehensive chassis status and configuration state information, and historic event logs. Used for post-deployment configuration verification and during debugging sessions.

To use this subcommand for CMC, you must have the **Administrator** privilege.

**Synopsis**

```
racadm racdump
```

**Input**

`Racdump` includes the following subsystems and aggregates the following RACADM commands:

- General System/RAC information - `getsysinfo`
- Session information - `getssinfo`
- Sensor information - `getsensorinfo`
- Switches information (IO Module) - `getioinfo`
- Mezzanine card information (Daughter card) - `getdcinfo`
- All modules information - `getmodinfo`
- Power budget information - `getpbinfo`
- KVM information - `getkvminfo`
- NIC information (CMC module) - `getniccfg`
- Redundancy information - `getredundancymode`
- Trace log information - `gettracelog`
- RAC event log - `getraclog`
- System event log - `getsel`

**Output**

The following information is displayed when the `racdump`subcommand is processed:

- General system/RAC information
- Coredump
- Session information
- Process information
- Firmware build information

# racreset

**Description**

Performs a CMC or a RAC reset operation.

**NOTE:** To use this subcommand, you must have the **Chassis Administrator** privilege.

**NOTE:** When you run a racreset subcommand, iDRAC may require up to two minutes to return to a usable state.

**NOTE:** You must restart your system after performing a hard reset of iDRAC.

**Synopsis**

```
racadm racreset [-m <module>]
```

**Input**

**(module)** — `server-n`, where n=1–4.

**NOTE:** You can specify multiple modules: -m <module 1> –m <module 2>.

**Example**

- Reset CMC:
  ```
  racadm racreset
  ```
- Reset server 1.
  ```
  racadm racreset -m server-1
  ```
- Reset servers 1 and 3.
  ```
  racadm racreset -m server-1 -m server-3
  ```

# racresetcfg

**Description**

Resets CMC configuration to factory default settings.

**NOTE:** To use this, you must have the **Chassis Administrator** privilege.

**Synopsis**

```
racadm racresetcfg [-m <module>] [-c <feature>]
```

**Input**

- -m : <module> — Must be one of the following values:
  - chassis — default state, if -m is not specified.
  - server-n, where n=1–4
  - switch-n, where n=1
- -c : <feature> — Must be one of the following values:
  - ad — Reset Active Directory properties to the default value. The default setting is “disabled”.

- pcap — Reset Power Cap properties to the default value.
- flex — Reset FlexAddress properties to the default value. The default setting is “enabled”.
- dpse — Reset Dynamic Power Supply Engagement to the default value. The default setting is “disabled”.

**NOTE:** The –c option is valid with only <module=chassis>.

**Example**

- Perform reset of configuration data to defaults for server-1 module
  ```
  racadm racresetcfg -m server-1
  ```
- Perform reset of power cap feature.
  ```
  racadm racresetcfg -c pcap
  ```
- Perform reset of configuration data to default for switch-1 module
  ```
  racadm racresetcfg -m switch-1
  ```

# racresetpcie

**Description** Resets the PCIe devices in the chassis to factory defaults.

**NOTE:** To use this subcommand for CMC, you must have the **Chassis Administrator** privilege.

**Synopsis**
```
racadm racresetpcie
```

# raid

**Description** Allows you to execute commands to control RAID arrays.
To use this subcommand for CMC you must have **Chassis Administartor** privilege.

**Synopsis**
```
racadm raid
```

**Example**

- Monitor Health of Storage root node
  ```
  racadm raid get status

  Storage Root Node Status : Ok
  ```
  This command retrieves the controllers keys, (FQDDs.)
- Monitor and Inventory all Controllers connected to the server
  ```
  racadm raid get controllers

  racadm raid get controllers -o
  ```
  This command is an optimized version and displays the full controller objects along with their keys.
  ```
  racadm raid get controllers -o -p <property names separated by comma>
  ```
  This command displays the filtered property values for all returned controller objects.
- Monitor and Inventory all batteries connected to the controller
  ```
  racadm raid get batteries --refkey <controller FQDDs
  separated by comma>
  ```

This command displays all battery keys connected to the controllers referred to as refkeys.

```
racadm raid get batteries --refkey <controller FQDDs
separated by comma > -o
```

This command is an optimized version and displays all battery objects for the controller FQDD.

```
racadm raid get batteries --refkey <controller FQDDs
separated by comma > -o -p <property names separated by comma>
```

This command is an optimized and filtered version.

```
racadm raid get batteries --refkey <controller FQDDs
separated by comma > -o -p <property names separated by comma>
```

- Monitor and Inventory all virtual disks connected to the controller

```
racadm raid get vdisks --refkey <controller FQDDs
separated by comma>
```

This command displays all vdisk keys connected to the controllers being mentioned as refkeys.

```
racadm raid get vdisks --refkey <controller FQDDs
separated by comma > -o
```

This command is an optimized version and displays all vdisk objects for the controller FQDD.

```
racadm raid get <controller > -pending
```

```
Raid.Integrated.1-1
Raid.Slot.2-1
```

- Monitor and Inventory all storage enclosures connected to the connector

```
racadm raid get enclosures --refkey <connector FQDDs
separated by comma>
```

This command displays all enclosure keys connected to the connectors being mentioned as refkeys.

```
racadm raid get enclosures --refkey <connector FQDDs
separated by comma > -o optimized version.
```

This command displays all enclosure objects for the connector FQDD.

```
racadm raid get enclosures --refkey <connector FQDDs
separated by comma > -o -p <property names separated by comma>
```

This command is an optimized and filtered version.

- Monitor and Inventory all Physical Disks connected to the enclosure /Backplanes

```
racadm raid get pdisks --refkey <enclosure/Backplane
FQDDs separated by comma>
```

This command displays all physical disk keys connected to the enclosures being mentioned as refkeys.

```
racadm raid get pdiks --refkey <enclosure/Backplanes
FQDDs separated by comma > -o
```

This command is an optimized version and displays all disk objects for the enclosure FQDD.

```
racadm raid get pdisks --refkey <enclosure/Backplanes
FQDDs separated by comma > -o -p <property names separated by comma>
optimized and filtered version.
```

- Monitor and Inventory all Fans connected to the enclosure

```
racadm raid get fans --refkey <enclosure FQDDs separated
by comma>
```

This command displays all fan keys connected to the enclosures referred as refkeys.

```
racadm raid get fans --refkey <enclosure FQDDs separated
by comma > -o optimized version.
```

This command displays all fan objects for the enclosure FQDD.

```
racadm raid get fans --refkey <enclosure FQDDs separated
by comma > -o -p <property names separated by comma> optimized and
filtered version.
```

- Monitor and Inventory all EMMs connected to the enclosure

```
racadm raid get emms --refkey <enclosure FQDDs separated
by comma>
```

This command will return all EMM keys connected to the enclosures being mentioned as refkeys.

```
racadm raid get emms --refkey <enclosure FQDDs separated
by comma > -o
```

This command is an optimized version and displays all EMM objects for the enclosure FQDD.

```
racadm raid get emms --refkey <enclosure FQDDs separated
by comma > -o -p <property names separated by comma>
```

This command is an optimized and filtered version.

- Monitor and Inventory all Temperature Probes connected to the enclosure

```
racadm raid get tempprobes --refkey <enclosure FQDDs
separated by comma>
```

This command displays all temperature probe keys connected to the enclosures being mentioned as refkeys.

```
racadm raid get tempprobes --refkey <enclosure FQDDs
separated by comma > -o
```

This command is an optimized version and displays all temperature probe objects for the enclosure FQDD.

```
racadm raid get tempprobes --refkey <enclosure FQDDs
separated by comma > -o -p <property names separated by comma>
optimized and filtered version
```

- Monitor and Inventory all Power Supply Units connected to the enclosure

```
racadm raid get psus --refkey <enclosure FQDDs separated
by comma>
```

This command displays all power supply units connected to the enclosures being mentioned as refkeys.

```
racadm raid get psus --refkey <enclosure FQDDs separated
by comma > -o
```

This command is an optimized version and displays all power supply units objects for the enclosure FQDD.

```
racadm raid get psus --refkey <enclosure FQDD's separated
by comma > -o -p <property names separated by comma>
```

This command is an optimized and filtered version.

## blink

**Description** Starts blinking or identifies operation on the specified device.

**Synopsis**

```
racadm raid blink:<PD FQDD>
racadm raid blink:<VD FQDD>
racadm raid blink {-pdkey:<comma separated PD FQDDs|-vdkey:<comma
separated VD FQDDs}
```

**Input**

- –pdkey: A comma-seperated list of physical disk drive FQDDs to use in the operation.
- –vdkey: A comma-seperated list of virtual drive FQDDs to use in the operation.

**Example**

```
racadm raid blink:Disk.Bay.0:Enclosure.Internal.
0-0:RAID.ChassisIntegrated.1-1
racadm raid blink:Disk.Virtual.0:RAID.ChassisIntegrated.1-1
racadm raid blink -pdkey:Disk.Bay.0:Enclosure.Internal.
0-0:RAID.ChassisIntegrated.1-1,Disk.Bay.0:Enclosure.Internal.
0-0:RAID.ChassisIntegrated.1-1
racadm raid blink -vdkey:Disk.Virtual.0:RAID.ChassisIntegrated.
1-1,Disk.Virtual.0:RAID.ChassisIntegrated.1-1
```

## createvd

**Description**

Creates a virtual disk on the basis of specification that you enter with this command.

**Synopsis**

```
racadm raid createvd:<Controller FQDD> -rl {r0|r1|r5|r6|r10|r50|
r60}[-wp {wt|wb}] [-rp {nra|ra|ara}]
[-ss {1k|2k|4k|8k|16k|32k|64k|128k|256k|512k|1M|2M|4M|8M|16M}]
-pdkey:<comma separated PD FQDD> [-dcp {enabled|disabled|default}]
[-name:<VD name>] [-size <VD size>{b|k|m|g|t}] [-cc] {-current|-
pending}
```

**Input**

- -rl: Set the RAID Level.
- r0: RAID 0 – Striping.
- r1: RAID 1 – Mirroring.
- r5: RAID 5 – Striping with Parity.
- r6: RAID 6 – Striping with Extra Parity.
- r10: RAID 10 – Spanned Striping with Mirroring.
- r50: RAID 50 – Spanned Striping with Parity.
- r60: RAID 60 – Spanned Striping with Extra Parity.
- -wp {wt | wb}: Set the write policy to Write Through or Write Back.
- -rp {nra|ra|ara}: Set the read policy to No Read Ahead, Read Ahead, or Adaptive Read Ahead.
- -ss: Specify the stripe size to use.
- -sc: Span count. This value must be entered while creating spanned RAID levels such as 10, 50, and 60.
- -pdkey: <PD FQDD list>: The PDs to use in the VD.
- -dcp: Set the Disk Cache Policy in the VD.
- enabled: Enabled – Allow the disk to use it's cache.
- disabled: Disabled – Disallow the disk from using its cache.
- default: Default – Use the default cache policy. SAS Drives - Use Disabled by Default. SATA Drives - Use Enabled by Default.
- –name: <VD name>: The name to give the VD.
- –size: <VD size>: The size of the VD.
  - b: Specify the size in bytes.
  - k: Specify the size in kilobytes
  - m: Specify the size in megabytes.
  - g: Specify the size in gigabytes.
  - t: Specify the size in terabytes.
- -cc: Create a CacheCade or Enhanced Cache VD.

**Example**

```
racadm raid createvd:RAID.ChassisIntegrated.1-1 -rl r0 -
pdkey:Disk.Bay.0:Enclosure.Internal.0-0:RAID.ChassisIntegrated.1-1
```

## deletevd

**Description** Deletes the specified virtual drive.

**Synopsis**

```
racadm raid deletevd:<VD FQDD> {-current|-pending}
```

**Input**

- –current <optional>: Performs the configuration right now.

  **NOTE:** If this requires the system to reboot, it will reboot.

- –pending: Save the configuration change for a later application. You can use a combination of the –pending and –current flags on multiple commands to reduce the possible number of system reboots.

**Example**

```
racadm raid deletevd:Disk.Virtual.0:RAID.ChassisIntegrated.1-1
```

## discardcache

**Description** Discards any pinned or persistent cache present on the RAID controller.

**Synopsis**

```
racadm raid discardcache:<Controller FQDD> {-current | -pending}
```

**Input**

- –current <optional>: Performs the configuration right now.

  **NOTE:** If this requires the system to reboot, the system is rebooted.

- –pending: Save the configuration change for a later application. You can use a combination of the –pending and –current flags on multiple commands to reduce the possible number of system reboots.

**Example**

```
racadm raid discardcache:RAID.ChassisIntegrated.1-1
```

## exportlog

**Description** Export a log from the device.

**Synopsis**

```
racadm raid exportlog:<FQDD> -l<CIFS or NFS share> -u<username> -
p <password> [-f <filename>]
```

**Input**

- –l<CIFS or NFS share>: The network share to write the log to.
- –u<username: The network username for the share.
- –p <password>: The network password for the share
- –f <filename>: The file name to write the log to.

**Example**

```
racadm raid exportlog:RAID.ChassisIntegrated.1-1 -l <CIFS or NFS
share> -u<username> -p <password> [-f <filename>]
```

## forceonline

**Description** Forces the RAID Controller to make the specified drive online. This operation may result in obsolete or corrupted data, and should only be attempted in cases where a rebuild operation has failed or is not applicable.

**Synopsis**

```
racadm raid forceonline:<PD FQDD> {current|pending}
```

**Input**

- –current <optional>: Performs the configuration right now.
- **NOTE:** If this requires the system to reboot, then the system is rebooted.
- –pending: Save the configuration change for a later application. You can use a combination of the –pending and –current flags on multiple commands to reduce the possible number of system reboots.

**Example**

```
racadm raid forceonline:Disk.Bay.0:Enclosure.Internal.
0-0:RAID.ChassisIntegrated.1-1
```

## get controllers

**Description** The command lists all RAID controllers detected in the system and their properties.

**NOTE:** To use this subcommand, you must have the **CMC Login User** privilege.

**Synopsis**

```
raid get controllers -o
```

**Input**

- **-o** — The **-o** is used to display the fault-tolerant status of a RAID controller.

**Example** Sample output of a CMC in which either fault-tolerant mode is not available or is not enabled.

```
RAID.ChassisIntegrated.1-1
Status                       = Ok
RollupStatus                 = Ok
Name                         = Shared PERC8 (Embedded)
FirmwareVersion              = 23.8.3-0027
DriverVersion                = 06.802.11.00
RebuildRate                  = 30 %
BgiRate                      = 35 %
CheckConsistencyRate         = 40 %
ReconstructRate              = 30 %
PatrolReadRate               = 30 %
PatrolReadMode               = Manual
PatrolReadState              = Stopped
CheckConsistencyMode         = Stop On Error
LoadBalanceSetting           = Disabled
CopybackMode                 = OFF
PreservedCache               = Not Present
CacheMemorySize              = 1024 MB
PersistHotspare              = Disabled
SpindownUnconfiguredDrives = Disabled
SpindownHotspare             = Disabled
Timeintervalforspindown      = 30 (Minutes)
SecurityStatus               = Unknown
EncryptionMode               = None
SasAddress                   = 0x590B11C02620E600
PciDeviceId                  = 0x2f
PciSubdeviceId               = 0x1f3e
```

```
PciVendorId                = 0x1000
PciSubvendorId             = 0x1028
PciBus                     = 0x0
PciDevice                  = 0x0
PciFunction                = 0x0
BusWidth                   = Unknown
SlotLength                 = Short
SlotType                   = Unknown
CapableSpeeds              = 6.0 Gb/s, 3.0 Gb/s
LearnMode                  = Not supported
HighAvailabilityMode       = None
PeerController            = N/A
```

Sample output of a CMC in which you have firmware support for the fault-tolerant mode and the hardware, and fault-tolerant mode is active, but a license is not available.

```
RAID.ChassisIntegrated.1-1
Status                        = Ok
RollupStatus                  = Ok
Name                          = Shared PERC8 (Embedded)
FirmwareVersion               = 23.8.3-0027
DriverVersion                 = 06.802.11.00
RebuildRate                   = 30 %
BgiRate                       = 35 %
CheckConsistencyRate          = 40 %
ReconstructRate               = 30 %
PatrolReadRate                = 30 %
PatrolReadMode                = Manual
PatrolReadState               = Stopped
CheckConsistencyMode          = Stop On Error
LoadBalanceSetting            = Disabled
CopybackMode                  = OFF
PreservedCache                = Not Present
CacheMemorySize               = 1024 MB
PersistHotspare               = Disabled
SpindownUnconfiguredDrives    = Disabled
SpindownHotspare              = Disabled
Timeintervalforspindown       = 30 (Minutes)
SecurityStatus                = Unknown
EncryptionMode                = None
SasAddress                    = 0x590B11C02620E600
PciDeviceId                   = 0x2f
PciSubdeviceId                = 0x1f3e
PciVendorId                   = 0x1000
PciSubvendorId                = 0x1028
PciBus                        = 0x0
PciDevice                     = 0x0
PciFunction                   = 0x0
BusWidth                      = Unknown
SlotLength                    = Short
SlotType                      = Unknown
CapableSpeeds                 = 6.0 Gb/s, 3.0 Gb/s
LearnMode                     = Not supported
HighAvailabilityMode           = Fault Tolerant(Active/Passive)
PeerController                  = RAID.ChassisIntegrated.
2-1


RAID.ChassisIntegrated.2-1
Status                        = Ok
RollupStatus                  = Ok
Name                          = Shared PERC8 (Embedded)
```

```
FirmwareVersion             = 23.8.3-0027
DriverVersion               = 06.802.11.00
RebuildRate                 = 30 %
BgiRate                     = 35 %
CheckConsistencyRate        = 40 %
ReconstructRate             = 30 %
PatrolReadRate              = 30 %
PatrolReadMode              = Manual
PatrolReadState             = Stopped
CheckConsistencyMode        = Stop On Error
LoadBalanceSetting          = Disabled
CopybackMode                = OFF
PreservedCache              = Not Present
CacheMemorySize             = 1024 MB
PersistHotspare             = Disabled
SpindownUnconfiguredDrives  = Disabled
SpindownHotspare            = Disabled
Timeintervalforspindown     = 30 (Minutes)
SecurityStatus              = Unknown
EncryptionMode              = None
SasAddress                  = 0x590B11C02620E600
PciDeviceId                 = 0x2f
PciSubdeviceId              = 0x1f3e
PciVendorId                 = 0x1000
PciSubvendorId              = 0x1028
PciBus                      = 0x0
PciDevice                   = 0x0
PciFunction                 = 0x0
BusWidth                    = Unknown
SlotLength                  = Short
SlotType                    = Unknown
CapableSpeeds               = 6.0 Gb/s, 3.0 Gb/s
LearnMode                   = Not supported
HighAvailabilityMode        = Fault Tolerant(Active/Passive)
PeerController                = RAID.ChassisIntegrated.
1-1
```

## hotspare

**Description** Stops blinking or identifies an operation on the specified device.

**Synopsis**

```
racadm raid hotspare:<PD FQDD> -assign {yes | no} {type {ghs |
dhs}} {-vdkey:<VD FQDD>} {-current | -pending}
```

**Input**

- –current <optional>: Performs the configuration right now.

  **NOTE:** If this requires the system to reboot it will reboot then.

- –pending: Save the configuration change for a later application. You can use a combination of the –pending and –current flags on multiple commands to reduce the possible number of system reboots.
- –assign {yes | no}: Assign or Unassign the physical disk drive as a hotspare.
- –type { ghs | dhs} : Assign as a global or dedicated hotspare.
- –vdkey: <VD FQDD>: Required for dedicated hotspare. Assign the dedicated hotspare to the specified VD.

**Example**

```
racadm raid hotspare:Disk.Bay.0:Enclosure.Internal.
0-0:RAID.ChassisIntegrated.1-1 -assign no
```

```
racadm raid hotspare:Disk.Bay.0:Enclosure.Internal.
0-0:RAID.ChassisIntegrated.1-1 -assign yes -type ghs
racadm raid hotspare:Disk.Bay.0:Enclosure.Internal.
0-0:RAID.ChassisIntegrated.1-1 -assign yes -type dhs -
vdkey:Disk.Virtual.0:RAID.ChassisIntegrated.1-1
```

## cancelinit

**Description** Stops an initialization operation on the specified virtual drive.

**Synopsis**

```
racadm raid cancelinit:<VD FQDD> {-current | -pending}
```

**Input**

- –current <optional>: Immediately performs the configuration operation.

  **NOTE:** If this requires the system to restart, the system will be restarted.

- –pending: Save the configuration change for a later application. You can use a combination of the –pending and –current flags on multiple commands to reduce the possible number of system rerestartts.

**Example**

```
racadm raid cancelinit:Disk.Virtual.0:RAID.ChassisIntegrated.1-1
```

## cancelrebuild

**Description** Stops a rebuild on a specified physical disk drive.

**Synopsis**

```
racadm raid cancelrebuild:<PD FQDD> {-current | -pending}
```

**Input**

- –current <optional>: Performs the configuration right now.

  **NOTE:** If this requires the system to restart, the system is restarted.

- –pending: Save the configuration change for a later application. You can use a combination of the –pending and –current flags on multiple commands to reduce the possible number of system rerestarts.

**Example**

```
racadm raid cancelrebuild:Disk.Bay.0:Enclosure.Internal.
0-0:RAID.ChassisIntegrated.1-1
```

## assignva

**Description** Stops an initialization operation on the specified virtual drive.

Assigns a virtual disk to one or more virtual adapters.

**Synopsis**

```
racadm raid assignva:<VA FQDD> -vdkey:<VD FQDD> -accesspolicy {na
| rw} -assignpolicy {single | multiple}{-current | -pending}
```

**Input**

- –current <optional>: Performs the configuration right now.

  **NOTE:** If this requires the system to reboot, the system will reboot then.

- –pending: Save the configuration change for a later application. You can use a combination of the –pending and –current flags on multiple commands to reduce the possible number of system restarts.
- –assignpolicy {single|multiple}: Uses the specified assign policy to determine if the Virtual Disk can be assigned to multiple Virtual Adapters.

**NOTE:** Enable cluster services on the servers when assigning Virtual Disk to multiple Virtual Adapters.

- –accesspolicy {na | rw}: Set the access policy to No Access or Read/Write.
- –vdkey:<VD FQDD>: The Virtual Drive to change the access to.

**Example**

```
racadm raid assignva:RAID.ChassisIntegrated.1-1-1 -
vdkey:Disk.Virtual.0:RAID.ChassisIntegrated.1-1 -accesspolicy
{ na | rw }

racadm raid assignva:RAID.ChassisIntegrated.1-1-2 -
vdkey:Disk.Virtual.0:RAID.ChassisIntegrated.1-1 -accesspolicy rw -
assignpolicy multiple
```

## unblink

**Description** Stops blinking or identifies an operation on the specified device.

**Synopsis**

```
racadm raid unblink:<PD FQDD>
racadm raid unblink:<VD FQDD>
racadm raid unblink {-pdkey:<comma separated PD FQDDs|-
vdkey:<comma separated VD FQDDs}
```

**Input**

- –pdkey: A comma-seperated list of physical disk drive FQDDs to use in the operation.
- –vdkey: A comma-seperated list of virtual drive FQDDs to use in the operation.

**Example**

```
racadm raid unblink:Disk.Bay.0:Enclosure.Internal.
0-0:RAID.ChassisIntegrated.1-1
racadm raid unblink:Disk.Virtual.0:RAID.ChassisIntegrated.1-1
racadm raid unblink -pdkey:Disk.Bay.0:Enclosure.Internal.
0-0:RAID.ChassisIntegrated.1-1,Disk.Bay.0:Enclosure.Internal.
0-0:RAID.ChassisIntegrated.1-1
racadm raid unblink -vdkey:Disk.Virtual.0:RAID.ChassisIntegrated.
1-1,Disk.Virtual.0:RAID.ChassisIntegrated.1-1
```

## init

**Description** Starts an initialization operation on the specified virtual drive.

**Synopsis**

```
racadm raid init:<VD FQDD> -speed {fast | full} {-current | -
pending}
```

**Input**

- –current <optional>: Performs the configuration right now.

  **NOTE:** If this requires the system to reboot it will reboot then.

- –pending: Save the configuration change for a later application. You can use a combination of the –pending and –current flags on multiple commands to reduce the possible number of system reboots.
- –speed{fast | full}: Perform a fast or full (slow) initialization on the virtual drive.

**Example**

```
racadm raid init:Disk.Virtual.0:RAID.ChassisIntegrated.1-1 -speed
fast
racadm raid init:Disk.Virtual.0:RAID.ChassisIntegrated.1-1 -speed
full
```

## raid

**Description**

Monitors, retrieves inventory, and configures the storage components connected to the chassis.

**NOTE:** To use this subcommand, you must have the **Chassis Administrator** privilege.

**Synopsis**

```
racadm raid get status

racadm raid get <Object type>

racadm raid get <Object type> -o

racadm raid get <Object type> -o -p <property names
separated by comma>

racadm raid get <Object type>:<FQDD's of Object type
separated by comma>

racadm raid set <Set Operation>:<FQDD of Object type>

racadm raid set <Set Operation> -pdkey:<FQDD of PD>

racadm raid set <Set Operation> -vdkey:<FQDD of VD>
```

**Input**

**NOTE:** Maximum property names that can be specified in –p option is 10.

**NOTE:** Maximum FQDDs that can be specified is 3.

- **(Object type)** — controllers, vdisks, pdisks.
- **Set Operation**
  - resetconfig
  - exportlog
  - forceonline
  - deletevd
  - blink
  - unblink
  - clearconfig
  - importconfig
  - ccheck
  - cancelcheck
  - patrolread
  - hotspare
  - init
  - assignva
  - createvd
- **–o** — Displays all the properties of the selected Key or Object.
- **–p** — Displays the property names with filter.
- **FQDD** — Displays all the properties of the FQDD's Key.

**Example**

- `racadm raid get controllers`
- `racadm raid get controllers -o`
- `racadm raid get controllers -o -p name,status`

- racadm raid get vdisks -o -p layout,status
- racadm raid get controllers:RAID.ChassisIntegrated.1-1
- racadm raid get controllers:RAID.ChassisIntegrated.1-1 -p status
- racadm raid resetconfig:RAID.ChassisIntegrated.1-1
- racadm raid exportlog:RAID.ChassisIntegrated.1-1 -l <CIFS or NFS share> -u <user name> -p <password> [-f <filename>]
- racadm raid forceonline:Disk.Bay.0:Enclosure.Internal.0-0:RAID.ChassisIntegrated.1-1
- racadm raid deletevd:Disk.Virtual.0:RAID.ChassisIntegrated.1-1
- racadm raid blink:Disk.Virtual.0:RAID.ChassisIntegrated.1-1
- racadm raid clearconfig:RAID.ChassisIntegrated.1-1
- racadm raid importconfig:RAID.ChassisIntegrated.1-1
- racadm raid ccheck:Disk.Virtual.0:RAID.ChassisIntegrated.1-1
- racadm raid cancelcheck:Disk.Virtual.0:RAID.ChassisIntegrated.1-1 {-pdkey:<comma separated PD FQDDs> | {-vdkey:<comma separated VD FQDDs>}
- racadm raid unblink {-pdkey:<comma separated PD FQDDs> | -vdkey:<comma separated VD FQDDs>}
- racadm raid patrolread:RAID.ChassisIntegrated.1-1 [-mode {auto | manual | disabled}] [-state {start | stop}] racadm raid hotspare:Disk.Bay.0:Enclosure.Internal.0-0:RAID.ChassisIntegrated.1-1 -assign {yes | no} -type { ghs | dhs} -vdkey:<FQDD of VD>
- racadm raid init:Disk.Virtual.0:RAID.ChassisIntegrated.1-1 -speed { fast | full } racadm raid cancelinit:Disk.Virtual.0:RAID.ChassisIntegrated.1-1 racadm raid assignva:<VA FQDD> -vdkey:<FQDD of VD> -accesspolicy { na | rw }
- racadm raid createvd:RAID.ChassisIntegrated.1-1 -rl {r0|r1|r5|r6|r10|r50|r60} [-wp {wt|wb}] [-rp {nra|ra|ara}] [-ss {1k|2k|4k|8k|16k|32k|64k|128k|256k|512k|1M|2M|4M|8M|16M}] -pdkey:<comma separated PD FQDDs>
- [-dcp {enabled|disabled|default}] [-name <VD name>] [-size <VD size> {b|k|m|g|t}] [-cc]
- racadm raid discardcache:RAID.ChassisIntegrated.1-1
- racadm raid changepolicy:Disk.Virtual.0:RAID.ChassisIntegrated.1-1 -wp {wt|wb} -rp {nra|ra|ara} -dcp {enabled|disabled|default} racadm raid rename:Disk.Virtual.0:RAID.ChassisIntegrated.1-1 -name <VD name>
- racadm raid ctrlprop:RAID.ChassisIntegrated.1-1 [-rebuild <value>>] [-bgi <value>] [-reconstruct <value>] [-checkconsistency <value>] [-ccmode {abortonerror | normal}] [-copybackmode {off | on | onwithsmart}] [-lb {auto | disabled}] [-prunconfigured {yes | no}] racadm raid rebuild:Disk.Bay.0:Enclosure.Internal.0-0:RAID.ChassisIntegrated.1-1 racadm raid cancelrebuild:Disk.Bay.0:Enclosure.Internal.0-0:RAID.ChassisIntegrated.1-1

## raid

**Description** Allows you to execute commands to control RAID arrays.

To use this subcommand for CMC you must have **Chassis Administartor** privilege.

**Synopsis** `racadm raid`

**Example**

- Monitor Health of Storage root node

```
racadm raid get status

Storage Root Node Status : Ok
```

This command retrieves the controllers keys, (FQDDs.)

- Monitor and Inventory all Controllers connected to the server

```
racadm raid get controllers

racadm raid get controllers -o
```

This command is an optimized version and displays the full controller objects along with their keys.

```
racadm raid get controllers -o -p <property names separated by comma>
```

This command displays the filtered property values for all returned controller objects.

- Monitor and Inventory all batteries connected to the controller

```
racadm raid get batteries --refkey <controller FQDDs
separated by comma>
```

This command displays all battery keys connected to the controllers referred to as refkeys.

```
racadm raid get batteries --refkey <controller FQDDs
separated by comma > -o
```

This command is an optimized version and displays all battery objects for the controller FQDD.

```
racadm raid get batteries --refkey <controller FQDDs
separated by comma > -o -p <property names separated by comma>
```

This command is an optimized and filtered version.

```
racadm raid get batteries --refkey <controller FQDDs
separated by comma > -o -p <property names separated by comma>
```

- Monitor and Inventory all virtual disks connected to the controller

```
racadm raid get vdisks --refkey <controller FQDDs
separated by comma>
```

This command displays all vdisk keys connected to the controllers being mentioned as refkeys.

```
racadm raid get vdisks --refkey <controller FQDDs
separated by comma > -o
```

This command is an optimized version and displays all vdisk objects for the controller FQDD.

```
racadm raid get <controller > -pending

Raid.Integrated.1-1
Raid.Slot.2-1
```

- Monitor and Inventory all storage enclosures connected to the connector

```
racadm raid get enclosures --refkey <connector FQDDs
separated by comma>
```

This command displays all enclosure keys connected to the connectors being mentioned as refkeys.

```
racadm raid get enclosures --refkey <connector FQDDs
separated by comma > -o optimized version.
```

This command displays all enclosure objects for the connector FQDD.

```
racadm raid get enclosures --refkey <connector FQDDs
separated by comma > -o -p <property names separated by comma>
```

This command is an optimized and filtered version.

- Monitor and Inventory all Physical Disks connected to the enclosure /Backplanes

```
racadm raid get pdisks --refkey <enclosure/Backplane
FQDDs separated by comma>
```

This command displays all physical disk keys connected to the enclosures being mentioned as refkeys.

```
racadm raid get pdiks --refkey <enclosure/Backplanes
FQDDs separated by comma > -o
```

This command is an optimized version and displays all disk objects for the enclosure FQDD.

```
racadm raid get pdisks --refkey <enclosure/Backplanes
FQDDs separated by comma > -o -p <property names separated by comma>
optimized and filtered version.
```

- Monitor and Inventory all Fans connected to the enclosure

```
racadm raid get fans --refkey <enclosure FQDDs separated
by comma>
```

This command displays all fan keys connected to the enclosures referred as refkeys.

```
racadm raid get fans --refkey <enclosure FQDDs separated
by comma > -o optimized version.
```

This command displays all fan objects for the enclosure FQDD.

```
racadm raid get fans --refkey <enclosure FQDDs separated
by comma > -o -p <property names separated by comma> optimized and
filtered version.
```

- Monitor and Inventory all EMMs connected to the enclosure

```
racadm raid get emms --refkey <enclosure FQDDs separated
by comma>
```

This command will return all EMM keys connected to the enclosures being mentioned as refkeys.

```
racadm raid get emms --refkey <enclosure FQDDs separated
by comma > -o
```

This command is an optimized version and displays all EMM objects for the enclosure FQDD.

```
racadm raid get emms --refkey <enclosure FQDDs separated
by comma > -o -p <property names separated by comma>
```

This command is an optimized and filtered version.

- Monitor and Inventory all Temperature Probes connected to the enclosure

```
racadm raid get tempprobes --refkey <enclosure FQDDs
separated by comma>
```

This command displays all temperature probe keys connected to the enclosures being mentioned as refkeys.

```
racadm raid get tempprobes --refkey <enclosure FQDDs
separated by comma > -o
```

This command is an optimized version and displays all temperature probe objects for the enclosure FQDD.

```
racadm raid get tempprobes --refkey <enclosure FQDDs
separated by comma > -o -p <property names separated by comma>
optimized and filtered version
```

- Monitor and Inventory all Power Supply Units connected to the enclosure

```
racadm raid get psus --refkey <enclosure FQDDs separated
by comma>
```

This command displays all power supply units connected to the enclosures being mentioned as refkeys.

```
racadm raid get psus --refkey <enclosure FQDDs separated
by comma > -o
```

This command is an optimized version and displays all power supply units objects for the enclosure FQDD.

```
racadm raid get psus --refkey <enclosure FQDD's separated
by comma > -o -p <property names separated by comma>
```

This command is an optimized and filtered version.

## rebuild

**Description** Starts a rebuild on a specified virtual drive.

**Synopsis**

```
racadm raid rebuild:<PQ FQDD> {-current | -pending}
```

**Input**

- –current <optional>: Performs the configuration.

  **NOTE:** If this requires the system to restart, the system is restarted.

- –pending: Save the configuration change for a later use. You can use a combination of the –pending and –current flags on multiple commands to reduce the possible number of system restarts.

**Example**

```
racadm raid rebuild:Disk.Bay.0:Enclosure.Internal.
0-0:RAID.ChassisIntegrated.1-1
```

## resetconfig

**Description** Removes the current RAID Configuration (Virtual Drives and Hotspares) from the RAID controller. This operation is not data-distructive, but is difficult to reverse.

**Synopsis**

```
racadm raid resetconfig:<Controller FQDD> {-current|pending}
```

**Input**

- –current <optional>: Performs the configuration right now.

  **NOTE:** If this requires the system to reboot, then the system will reboot.

- –pending: Save the configuration change for a later application. You can use a combination of the –pending and –current flags on multiple commands to reduce the possible number of system reboots.

**Example**

- `racadm raid resetconfig:RAID.ChassisIntegrated.1-1`

## enableperc

**Description** Indicates the RAID configuration of hardware RAID connected to the server. This subcommand enables the power to a RAID card.

**NOTE:**

- This subcommand operates only on the second PERC adapter.
- Using this subcommand will power cycle the chassis and set the fault-tolerant system configuration to fault-tolerant mode.
- While enabling the second PERC adapter, if any PERC adapter settings are changed or firmware is updated, a message is displayed and the fault-tolerant status is degraded. Make sure that the firmware and the settings of the SHARED PERC match to set the fault-tolerant system configuration to fault-tolerant mode.

**Synopsis** `racadm raid enableperc:<AdapterFQDD>`

**Example** `racadm raid enableperc:RAID.ChassisIntegrated.2-1`

### disableperc

**Description** Indicates the RAID configuration of hardware RAID connected to the system. This subcommand disables the power to a RAID card.

**NOTE:**

- This subcommand operates only on the second PERC adapter.
- Using this subcommand will power cycle the chassis and set the fault-tolerant system configuration to Single PERC mode.

**Synopsis** `racadm raid disableperc:<AdapterFQDD>`

**Example** `racadm raid disableperc:RAID.ChassisIntegrated.2-1`

## remoteimage

**Description** Connects, disconnects, or deploys a media file on a remote server.
To use this subcommand, you must have the **Administrator** privilege.

**Synopsis** `racadm remoteimage <options>`

**Input**

- **-c** - Connect the image.
- **-d** - Disconnect the image.
- **-u** - Username to access the network share.
- **-p** - Password to access the network share.
- **-l** - Image location on the network share; use double quotation marks with a location.
- **-s** - Display current status; –a is assumed, if not specified.

**Example**

- `racadm remoteimage -c -u "user" -p "pass" -l //shrloc/foo.iso`

  Remote Image is now Configured
- `racadm remoteimage -d - disconnect`

  Disable Remote File Started. Please check status using -s option to know Remote File Share is ENABLED or DISABLED.
- `racadm remoteimage –s - status`

  Remote File Share is Enabled

UserName
Password
ShareName //10.94.161.112/xxxx/dtk_3.3_73_Linux.iso

# serveraction

**Description** Enables you to perform power management operations on the host system.
To use this subcommand, you must have the **Execute Server Control Commands** permission.

**Synopsis** `racadm serveraction <action>`

**Input**

- -m <*module*> -
  server-n, where *n*=1–4
- -a - Performs action on all servers. Not allowed with the powerstatus action.
- -f - Force the action. Required for the reseat action.
- <*action*>- Specifies the action. The options for the <*action*> string are:
  — graceshutdown — Performs a graceful shutdown of the server. If the operating system on the server cannot be cleanly shutdown, this operation will not be performed.
  — hardreset — Performs a reset (reboot) operation on the managed system.
  — powercycle — Issues a power-cycle operation on the managed system. This action is similar to pressing the power button on the system's front panel to turn off, and then turn on the system.
  — powerdown — Turns off the managed system.
  — powerup — Turns on the managed system.
  — powerstatus — Displays the current power status of the server (ON or OFF).
  — reseat — Performs a virtual reseat of the server. This operation simulates reseating the server by resetting the iDRAC on a server.

**NOTE:** The action **powerstatus** is not allowed with an -a option.

**Output** Displays an error message if the requested operation fails, or a success message if the operation is completed.

**Example**

- Turn off server 3 from the CMC
  `racadm serveraction -m server-3 powerdown`
  Server power operation successful
- Turn off server 3 from iDRAC
  `racadm serveraction powerdown`
  Server power operation successful
- Turn off server 3 from CMC when Power is already Off on that server
  `racadm serveraction -m server-3 powerdown`
  Server is already powered OFF.
- Turn off the server from iDRAC when Power is already off on that server.
  `racadm serveraction powerdown`
  Server is already powered OFF
- Get Power Status of server 2 on CMC
  `racadm serveraction -m server-2 powerstatus`

ON

- Get Power Status on iDRAC

  ```
  racadm serveraction powerstatus
  ```

  Server Power Status: ON
- Reseat server 2 on CMC

  ```
  $ racadm serveraction -m server-2 reseat -f
  ```

  Server power operation successful
- Explanation of Support
  iDRAC needs to support graceful shutdown
  The support of address individual blades is expected on the CMC

# set

**Description**

Imports the saved CMC Event Filter configuration from a file.

**NOTE:** Currently, these commands are supported only in remote RACADM.

**Synopsis**

```
racadm set -f <filename>
```

**Input**

- –f: Configure event filter configurations from a configuration file.

**Example**

- –Configure event filter configurations from a configuration file.

  ```
  racadm -r 10.94.161.119 -u root -p calvin set -f
  config.txt
  ```

# setassettag

**Description**

Sets the N-byte ASCII asset tag for the chassis.
To use this subcommand, you must have the **Administrator** privilege.

**Synopsis**

```
racadm setassettag -m chassis <asset tag>
```

**Input**

**-m** <*module*> — Specifies the module whose asset tag you want to set.
Legal value: chassis
You can obtain the same output if you do not include this option, because there is only one legal value.
<*assettag*> is a maximum of 64 non-extended ASCII characters.

**Example**

- ```
  racadm setassettag -m chassis 783839-33
  ```
- ```
  racadm setassettag 783839-33
  ```

  ```
  The asset tag was changed successfully.
  ```

# setchassisname

**Description**

Sets the name of the chassis in the LCD.

To use this subcommand, you must have the **Administrator** privilege.

**Synopsis**

```
racadm setchassisname <name>
```

**NOTE:** Chassisname is a maximum of 64 non-extended ASCII characters.

**Example**

```
racadm setchassisname dellchassis-1

The chassis name was set successfully.
```

# setflexaddr

**Description**

Enables or disables FlexAddress on a particular slot or fabric.

To use this subcommand, you must have the **Chassis Configuration Administrator** privilege.

If the fabric type is determined to be Infiniband, the operation is canceled and the command returns an error. If the FlexAddress feature is not activated, the command returns an error.

**NOTE:** The server must be turned off to change the slot state. All servers must be turned off to change the fabric state. The MAC/WWN addresses must be managed locally (not by an external console) to use this command.

**Synopsis**

```
racadm setflexaddr [-i <slot#> <state>]

[-f <fabricName> <state>]
```

<*slot#*> = 1 to 4

<*fabricName*> = A

<*state*> = 0 or 1

where **0** is disable and **1** is enable.

**Input**

- -i <*slot#*> <*state*> — Enables or disables FlexAddress for the specified slot.
- -f <*fabricName*> <*state*> — Enables or disables FlexAddress for the specified fabric.

**Example**

- ```
  racadm setflexaddr -i 1 0

  Slot 1 FlexAddress state set successfully
  ```
- ```
  racadm setflexaddr -f A 1

  Fabric A FlexAddress state set successfully
  ```
- ```
  racadm setflexaddr -f idrac 1
  ```

# setled

**Description**

Sets the state (blinking or not blinking) of the LED on the specified module.

To blink or unblink the chassis, I/O modules or the CMC, you must have the **Debug Administrator** privilege on CMC. To enable the servers to blink or unblink, you must have the **Server Administrator** or **Debug Administrator** privilege on CMC.

**Synopsis**

```
racadm setled -m <module> -l <ledState>
```
```

**Input**

- -m <*module*> - Specifies the module whose LED you want to configure.
  <*module*> can be one of the following:
  — server-n, where *n*=1–4
  — switch-n, where n=1
  — cmc-active
  — chassis
- -l <*ledstate*> - Specifies whether the LED should blink.
  <*ledstate*> can be one of the following:
  – 0 — no blinking
  – 1 — blinking

**Example**

- `racadm setled -m server-1 -1 1`
  LED state was set successfully.

  **NOTE:** The `setled` command generates an error when used on the extension slot of a multi-slot server.
- `racadm setled -m server-9 -1 1`
  ERROR: Server in slot 9 is an extension of the server in slot 1.

# setniccfg

**Description**

Sets the iDRAC IP address. It displays an error message if the requested operation could not be performed, or a success message, if the operation is completed successfully.

To use this subcommand, you must have the **Configure iDRAC** privilege.

**NOTE:** The terms NIC and Ethernet management port may be used interchangeably.

**Synopsis**

- `racadm setniccfg -d`
- `racadm setniccfg -d6`
- `racadm setniccfg -s <IPv4Address> <netmask> <IPv4 gateway>`
- `racadm setniccfg -s6 <IPv6 Address> <IPv6 Prefix Length> <IPv6 Gateway>`
- `racadm setniccfg -o`

**Input**

- -d — Enables DHCP for the NIC (default is “DHCP disabled”.)
- -d6 — Enables AutoConfig for the NIC. It is enabled by default.
- -s — Enables static IP settings. The IPv4 address, netmask, and gateway can be specified. Otherwise, the existing static settings are used. <*IPv4Address*>, <*netmask*>, and <*gateway*> must be typed as dot-separated strings.

  racadm setniccfg -s 192.168.0.120 255.255.255.0 192.168.0.1
- -s6 — Enables static IPv6 settings. The IPv6 address, Prefix Length, and the IPv6 gateway can be specified.
- -o — Enable or disable NIC.

**Example**

- `racadm setniccfg -s 192.168.0.120 255.255.255.0 192.168.0.1`
- `racadm setniccfg -d`
- `racadm setniccfg -d6`

# setpciecfg

**Description** You can configure PCIe slots and Virtual Adapters, and also set the ride-through properties.

**NOTE:** To use this subcommand, you must have **Chassis Administrator** privilege.

**NOTE:** The slot assignment feature is licensed.

**Synopsis**

```
racadm setpciecfg assign [-c <FQDD>] [-i <server slot>]

racadm setpciecfg unassign [-c <FQDD>]

racadm setpciecfg ridethru -e

racadm setpciecfg ridethru -d

racadm setpciecfg ridethru -t <time out value>
```

**Input**

- **-c** — Use this option to specify a PCIe adapter or Virtual Adapter.
- **-i** — Use this option to specify the slot number.
- **FQDD** — FQDD of the specified PCIe slot or Virtual Adapter.
- **-e** — Use this option to enable the ride-through mode.
- **-d** — Use this option to disable the ride-through mode.
- **-t** — Use this option to set the time-out property of a ride-through mode in seconds (0, 60–1800; 0=infinite).

**Example**

- Assign a PCIe slot to a server:
  ```
  racadm setpciecfg assign -c PCIE.ChassisSlot.5 -i 2
  ```
- Assign the Virtual Adapter to a server:
  ```
  racadm setpciecfg assign -c RAID.ChassisIntegrated.1-1-2  -i 3
  ```
- Unassign a PCIe slot:
  ```
  racadm setpciecfg unassign -c PCIE.ChassisSlot.3
  ```
- Unassign a Virtual Adapter:
  ```
  racadm setpciecfg unassign -c RAID.ChassisIntegrated.1-1-3
  ```
- Enable ride-through mode
  ```
  racadm setpciecfg ridethru -e
  IOV000: Successfully completed the operation.
  ```
- Disable ride-through mode
  ```
  racadm setpciecfg ridethru -d
  IOV000: Successfully completed the operation.
  ```
- Set the ride-through time out value in seconds (0, 60–1800; 0 = infinite)
  ```
  racadm setpciecfg ridethru -t 300
  IOV000: Successfully completed the operation.
  ```

# setractime

**Description**

Sets the date and time on the CMC.

To use this subcommand, you must have the **Administrator** privilege.

**Synopsis**

- racadm setractime -d <*yyyymmddhhmmss.mmmmmmsoff*>
- racadm setractime -l YYYYMMDDhhmmss
- racadm setractime -z {?|timezone|timezone-prefix*}

**Input**

- -d — Sets the time to value in the string:

  — yyyy is the year

  — mm is the month

  — dd is the day

  — hh is the hour

  — mm is the minutes

  — ss is the seconds

  — mmmmmm is the number of microseconds

  — s is a + (plus) sign or a - (minus) sign, which indicates the sign of the offset.

  — off is the offset in minutes

  **NOTE:** 'Off' is the offset in minutes from GMT and must be in 15-minute increments. The timezone is represented as an offset from GMT, and the clock does not automatically adjust to daylight savings time (for the '-d' option).

- -z <*zone*> - Sets the time zone by name or index, or lists possible time zones. For example, PST8PDT (Western United States), 294 (Seoul), 344 (Sydney). <*zone*> may be:

  — <*?*> lists the major timezone names/prefixes.

  — <*timezone*> is the case-sensitive name of your timezone or the index listed by '-z timezone-prefix*'.

  — <*timezone-prefix**> is a prefix of one or more timezones, followed by '*'.

  **NOTE:** The timezone or daylight savings time is fully supported for '-l' and '-z' options. Omit the '-l' option to set the timezone only (eg. '-z US/Central').

- -l — Sets the local date and time in the string yyymmddhhmmss where:

  — yyyy is the year

  — mm is the month

  — dd is the day

  — hh is the hour

  — mm is the minute

  — ss is the second

— Setting the time using the -l and -z options is recommended. This command format allows the CMC to fully support local time zones, including the ability to automatically adjust the CMC time to the local Daylight Savings Time.

**Example**

The setractime subcommand supports dates ranging from 1/1/1970 00:00:00 through 12/31/2030 23:59:59. To set the local time to October 24, 2007 at 3:02:30 PM:

```
racadm setractime -l 20071024150230

The time was set successfully.
```

# setslotname

**Description**

Sets the name of the server slot and enables the feature to display the host name (if available) of all the four server slots, or of a specified slot (indicated by the server slot number) in the chassis. Optionally, use this command to set whether the server slot name or host name is displayed in the CMC Web interface or with the **getslotname -i <*slot Num*>** command. If the host name is not available, the static server slot name is used.

To use this subcommand, you must have the **Administrator** privilege.

**NOTE:** The OMSA server agent must be present and running on the server to use the Display Hostname feature. If the agent is not running, the setting is ignored. For more information, see the *Dell OpenManage Server Administrator User's Guide* at **support.dell.com/manuals**.

**Synopsis**

```
racadm setslotname [-i <slotNum> <slotname> | -h 0|1]

racadm setslotname -h <enabled>
```

**Input**

- <*slotNum*> — Specify the slot number in the chassis. Valid values: 1 to 4.
- <*slotname*> — The new name to be assigned to the slot.
- <*enabled*> — Sets whether the server's host name is used for display purposes. Valid values: 0 or 1.

**Example**

- Set the name of slot 3 as server3:
  ```
  racadm setslotname -i 3 server3
  ```
- Enable system to display host names (1=Active):
  ```
  racadm setslotname -h 1
  ```

# setsysinfo

**Description**

Sets the name or location of the chassis.

To use this subcommand, you must have the **Administrator** privilege.

**Synopsis**

```
racadm setsysinfo [-c chassisname|
chassislocation]
<string>
```

**Input**

- <*string*> — Indicates a maximum of 64 non-extended ASCII chassis name or location.
- **-c** — Sets the chassis name or location.

**Example**

```
racadm setsysinfo -c chassisname "Dell
Rack System"

The chassis name was set successfully.
```

# SSH or Telnet RACADM

```
racadm getconfig -g <groupname> [-o <objectname>]
[-i <indexnumber>]

racadm <subcommand>
```

**Example**

```
racadm getconfig -g idracinfo

racadm getsysinfo
```

# sshpkauth

**Description**

Enables you to upload and manage up to six (6) different SSH public keys. You can upload a key file or key text, view keys, or delete keys.

```
racadm sshpkauth -i svcacct -k <key index> -p
<privilege> -t <PK key text>

racadm sshpkauth -i svcacct -k <key index> -p
<privilege> -f <PK key file>

racadm sshpkauth -v -i svcacct -k <key index>

racadm sshpkauth -d -i svcacct -k <key index>
```

**Synopsis**

```
racadm sshpkauth
```

**Input**

- **-i** Index for the user. <*svcacct*> is the Index for CMC.
- **-k** index from 1-6 (or all for -v / -d options) to assign the PK key being uploaded.
- **-p** privilege level to give to user for this PK key.
- **-t** Key text for the PK key.
- **-f** file containing key text to upload.

  **NOTE:** This option is supported only on the remote interface(s).
- **-v** - View privilege and key text.
- **-d** - Delete key and privilege for the index provided.

**Examples** :

- View all keys

  ```
  racadm sshpkauth -i svcacct -k all -v
  ```
- Delete all keys

  ```
  racadm sshpkauth -i svcacct -k all -d
  ```

- Upload key at index 2 using text option

  ```
  racadm sshpkauth -i svcacct -k 2 -p 0xfff -t "key text"
  ```

- Upload key at index 1 using file upload option.

  ```
  racadm sshpkauth -i svcacct -k 1 -p 0xfff -f idrsa.pub
  ```

# sslcertupload

| | |
|---|---|
| **Description** | Uploads a custom SSL server or CA certificate for Directory Service from the client to iDRAC.<br>To use this subcommand, you must have the **CMC Configuration** permission. |
| **Synopsis** | `racadm sslcertupload -t <type> [-f <filename>]` |
| **Input** | • -t — Specifies the type of certificate to upload, either the CA certificate for Directory Service or the server certificate.<br>— 1 = server certificate.<br>— 2 = CA certificate for Directory Service<br>— 5 = Kerberos keytab<br>— 6 = Server certificate and key<br>• -f — Specifies the file name of the certificate to be uploaded.<br>• -k — Specifies the optional source filename for private key when uploading type 6. |
| **Output** | The sslcertupload command returns 0 when successful, and returns a nonzero number when unsuccessful. |
| **Example** | `racadm sslcertupload -t 1 -f c:\cert \cert.txt` |

# sslcertview

| | |
|---|---|
| **Description** | Displays the SSL server or CA certificate that exists on iDRAC. |
| **Synopsis** | `racadm sslcertview -t <type> [-A]` |
| **Input** | • -t — Specifies the type of certificate to view, either the CA certificate or server certificate.<br>—1 = server certificate<br>—2 = CA certificate for Directory Service.<br>• **-A** — Prevents printing of headers or labels. |

**Output**

```
racadm sslcertview -t 1

Serial Number          00
```

**Subject Information:**

| | |
|---|---|
| Country Code (CC) | US |
| State (S) | Texas |
| Locality (L) | Round Rock |
| Organization (O) | Dell Inc. |
| Organizational Unit (OU) | Remote Access Group |
| Common Name (CN) | iDRAC Default certificate |

**Issuer Information:**

| | |
|---|---|
| Country Code (CC) | US |
| State (S) | Texas |
| Locality (L) | Round Rock |
| Organization (O) | Dell Inc. |
| Organizational Unit (OU) | Remote Access Group |
| Common Name (CN) | iDRAC Default certificate |
| Common Name (CN) | iDRAC Default certificate |
| Valid From | Jul 8 16:21:56 2005 GMT |
| Valid To | Jul 7 16:21:56 2010 GMT |

```
racadm sslcertview -t 1 -A
00
US
Texas
Round Rock
Dell Inc.
Remote Access Group
iDRAC default certificate
US
Texas
Round Rock
Dell Inc.
Remote Access Group
iDRAC default certificate
Jul 8 16:21:56 2005 GMT
Jul 7 16:21:56 2010 GMT
```

# sslcsrgen

**Description**

Generates and downloads a CSR file to the client's local file system. The CSR can be used for creating a custom SSL certificate that can be used for SSL transactions on iDRAC.

**Synopsis**

```
racadm sslcsrgen [-g] [-f <filename>]

racadm sslcsrgen -s
```

**Input**

- **-g** — Generates a new CSR.
- **-s** — Returns the status of a CSR generation process (generation in progress, active, or none).
- **-f** — Specifies the filename of the location, <*filename*>, where the CSR is downloaded.

**NOTE:** If the -f option is not specified, the filename defaults to sslcsr in your current directory.

**Output**

If no options are specified, a CSR is generated and downloaded to the local file system as sslcsr by default. The -g option cannot be used with the -s option, and the -f option can only be used with the -g option.

The sslcsrgen -s subcommand returns one of the following status codes:

- CSR was generated successfully.
- CSR does not exist.

| | |
|---|---|
| **Example** | `racadm sslcsrgen -s`<br><br>`or`<br><br>`racadm sslcsrgen -g -f c:\csr \csrtest.txt` |

**NOTE:** Before a CSR can be generated, the CSR fields must be configured in the RACADM cfgRacSecurity group. For example: `racadm config -g cfgRacSecurity -o cfgRacSecCsrCommonName MyCompany`

**NOTE:** In telnet/ssh console, you can only generate and not download the CSR file.

# sslresetcfg

| | |
|---|---|
| **Description** | Restores the web-server certificate to factory default and restarts web-server. The certificate takes effect 30 seconds after the command is entered.<br>To use this subcommand, you must have the **Chassis Configuration Administrator** privilege for CMC. |
| **Synopsis** | `racadm sslresetcfg` |
| **Example** | `$ racadm sslresetcfg`<br><br>`Certificate generated successfully and webserver restarted.` |

# testemail

| | |
|---|---|
| **Description** | Sends a test e-mail to a specified destination. Prior to executing the test e-mail command, make sure that the SMTP server is configured and the specified index in the **RACADM cfgEmailAlert** group is enabled and configured properly. |
| **Synopsis** | `racadm testemail -i <index>` |
| **Input** | -i — Specifies the index of the e-mail alert to test. |
| **Output** | `Success: Test e-mail sent successfully`<br><br>`Failure: Unable to send test e-mail` |
| **Example** | Commands for the **cfgEmailAlert** group:<br>• Enable the alert —<br>`racadm config -g cfgEmailAlert -o cfgEmailAlertEnable -i 1`<br>• Set the destination e-mail address —<br>`racadm config -g cfgEmailAlert -o cfgEmailAlertAddress -i 1 user1@mycompany.com`<br>• Set the custom message that is sent to the destination e-mail address —<br>`racadm config -g cfgEmailAlert -o cfgEmailAlertCustomMsg -i 1 "This is a test!"`<br>• Make sure that the SMTP IP address is configured properly —<br>`racadm config -g cfgRemoteHosts -o cfgRhostsSmtpServerIpAddr 192.168.0.152` |

- View the current e-mail alert settings —
  `racadm getconfig -g cfgEmailAlert -i <index>`

  where <*index*> is a number from 1 to 4.

# testfeature

The following tables describe the **testfeature** subcommand options.

| Option | Description |
|---|---|
| **-f** <*feature*> | Specifies the feature name. **testfeature** supports the following features:<br>• ad — Tests Active Directory configuration using simple authentication (user name and password).<br>• adkrb — Tests Active Directory configuration using the Kerberos authentication.<br>• ldap — Tests LDAP configuration and operation (requires user name and password). |
| **-u** <*username*> | The user name specified in an appropriate format for the selected authentication method. That is, Active Directory users are specified as user_name@domain_name. |
| **-p** <*password*> | The password for the indicated user account. |
| **-d** <*bitmask*> | A bitmask (specified as a hexadecimal value) to select various diagnostic messaging levels. This option is optional.<br>**NOTE:** -d option is not supported with the remote racadm interface. |

**testfeature -f ad**

| | |
|---|---|
| **Description** | Tests Active Directory configuration using simple authentication (user name and password). Use the optional `-d` switch to obtain additional diagnostic information, as needed.<br>This subcommand when executed performs the following:<br>• Checks command syntax.<br>• Verifies whether the required system resources are available.<br>• Validates Active Directory configuration.<br>• Verifies the SSL certificate and if the certificate signing request (key) exists.<br>• Acquires LDAP and Global Catalog Service records from DNS.<br>• Acquires user privileges from the Active Directory server.<br>• Checks the time to acquire user privileges with the allotted time to login. |

**NOTE:** In the event of an error, the command displays the test that failed, all the tests performed earlier to the test that failed, and all the error messages.

**Synopsis**

```
testfeature -f ad -u <username> -p
<password>
[-d <diagnostic-message-level>]
```

**Example**

- `testfeature –f ad –u user@domain –p secret`

  SUCCESSFUL: User permissions are xxxxxppp.

  The last three digits are the user's permissions.
- `testfeature –f adkrb –u user_name@domain_name`

  `SUCCESSFUL: User permissions are 80000fff.`
- `testfeature -f ldap -u harold -p barrel`

  `SUCCESSFUL: User permissions are 0x00000fff.`

### testfeature -f adkrb

**Description**

Tests the Active Directory configuration using the Kerberos authentication (single sign-on or Smart Card login). Use the optional **-d** switch to obtain additional diagnostic information, as needed. This subcommand, when run, performs the following:

- Checks command syntax.
- Verifies if the required system resources are available.
- Validates Active Directory configuration.
- Verifies if the SSL certificate and certificate signing request (key) exists.
- Acquires LDAP and Global Catalog Service records from DNS.
- Verifies if the CMC can acquire CMC, LDAP and Global Catalog servers FQDN through reverse IP lookups.
- Verifies that the CMC principal name matches the principal name in the uploaded Keytab file.
- Verifies that the CMC acquires a Kerberos TGT.
- Acquires user privileges from the Active Directory server.
- Checks the time to acquire user privileges with the allotted time to login.

**NOTE:** In the event of an error, the command outputs all tests performed up to and including the test that failed, and all the error messages.

**Synopsis**

```
testfeature -f adkrb -u <username> [-d
<diagnostic-message-level>]
```

### testfeature -f ldap

**Description**

Tests LDAP configuration and operation, and reports success as each stage of the authentication process proceeds. After successful completion, this command prints the CMC privileges assumed by the specified <*username*>.

If a failure occurs, the command stops with an error message that displays the required corrective action. Use the optional **-d** switch to obtain additional diagnostic information, as needed.

**Synopsis**

```
testfeature -f ldap -u <username> -p
<password>
[-d <diagnostic-message-level>]
```

# testtrap

**Description**

Tests the RAC's SNMP trap alerting feature by sending a test trap from iDRAC to a specified destination trap listener on the network.

To use this subcommand, you must have the **Test Alerts** privilege.

**NOTE:** Before you execute the **testtrap** subcommand, make sure that the specified index in the **RACADM cfgAlerting** group is configured properly.

**Synopsis**

```
racadm testtrap -i <index>
```

**Input**

**-i** — Specifies the index of the trap configuration to be used for the test. Valid values are from 1 to 4.

**Example**

```
Commands for the cfgIpmiPet group:
```

- Enable the alert

  ```
  racadm config -g cfgIpmiPet -o cfgIpmiPetAlertEnable -i 1
  ```

- Set the destination e-mail IP address

  ```
  racadm config -g cfgIpmiPet -o cfgIpmiPetAlertDestIpAddr
  -i 1 192.168.0.110
  ```

- View the current test trap settings

  ```
  racadm getconfig -g cfgIpmiPet -i <index>
  ```

  where <*index*> is a number from 1 to 4.

# traceroute

**Description**

Traces the network path of routers that packets take as they are forwarded from your system to a destination IPv4 address.

To use this subcommand, you must have the **Administrator** privilege.

**Synopsis**

```
racadm traceroute <IPv4 address>

racadm traceroute 192.168.0.1
```

**Input**

```
racadm traceroute 192.168.0.1
```

**Output**

```
traceroute to 192.168.0.1
(192.168.0.1), 30 hops
max,

40 byte packets

1 192.168.0.1 (192.168.0.1) 0.801 ms
0.246 ms 0.253 ms
```

## traceroute6

**Description**

Traces the network path of routers that packets take as they are forwarded from your system to a destination IPv6 address.

To use this subcommand, you must have the **Administrator** privilege.

**Synopsis**

```
racadm traceroute6 <IPv6 address>

racadm traceroute fd01::1
```

**Output**

```
traceroute to fd01::1 (fd01::1) from
fd01::3,
30 hops

max, 16 byte packets

1 fd01::1 (fd01::1) 14.324 ms 0.26 ms
0.244 ms
```

# 3

# CMC Property Database Group and Object Descriptions

The CMC property database contains the configuration information for CMC. Data is organized by associated object, and objects are organized by object group. The IDs for the groups and objects that the property database supports are listed in this section for CMC.

Use the group and object IDs with the RACADM subcommands to configure CMC.

**NOTE:** You can configure any setting that is not preceded by the hash sign (#) in the output. To modify a configurable object, use the **-o** option.

**NOTE:** To view a list of groups that you can use with the database objects, run the command. The -h, or help option, displays a list of all available configuration groups in alphabetical order. This option is useful when you do not have exact group names.

**NOTE:** RACADM sets the value of objects without performing any functional validation on them. For example, RACADM allows you to set the Certificate Validation object to 1 with the Active Directory object set to 0, even though Certificate Validation can happen only if Active Directory is enabled. Similarly, the **cfgADSSOEnable** object can be set to 0 or 1 even if the **cfgADEnable** object is 0, but it takes effect only if Active Directory is enabled.

All string values are limited to displayable ASCII characters, except where otherwise noted.

## idRacInfo

This group contains display parameters to provide information about the specifics of CMC being queried. One instance of the group is allowed.

Use this object with the `getconfig` subcommand.

To use this object, you must have **CMC Login User** privilege.

The following sections provide information about the objects in the **idRACInfo** group.

### idRacProductInfo (Read Only)

| | |
|---|---|
| **Description** | A text string that identifies the product. |
| **Legal Values** | A string of up to 63 ASCII characters. |
| **Default for iDRAC** | Integrated Dell Remote Access Controller. |
| **Default for CMC** | Chassis Management Controller. |

### idRacVersionInfo (Read Only)

| | |
|---|---|
| **Description** | String containing the current product firmware version. |
| **Legal Values** | A string of up to 63 ASCII characters. |
| **Default** | The current version number. |

### idRacBuildInfo (Read Only)

| | |
|---|---|
| **Description** | String containing the current RAC firmware build version. |
| **Legal Values** | A string of up to 16 ASCII characters. |
| **Default for CMC** | The current CMC firmware build version. |

### idRacName (Read Only)

| | |
|---|---|
| Description | A user-assigned name to identify this controller. |
| Legal Values | A string of up to 15 ASCII characters. |
| Default for CMC | CMC |

## cfgLanNetworking

This group contains parameters to configure NIC for IPv4.

One instance of the group is allowed. Some objects in this group may require iDRAC NIC to be reset, which may cause a brief loss in connectivity. Objects that change iDRAC NIC IP address settings close all active user sessions and require users to reconnect using the updated IP address settings.

Use this object with the **config** or **getconfig** subcommands.

To use this object property, you must have the **Chassis Configuration Administrator** privilege.

**NOTE:** You can configure any setting that is not preceded by the hash sign (#) in the output. To modify a configurable object, use the -o option.

The following sections provide information about the objects in the **cfgLanNetworking** group.

### cfgNicIPv4Enable (Read or Write)

| | |
|---|---|
| **Description** | Enables or disables the IPv4 stack. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 0 |

### cfgNicVLanId (Read or Write)

| | |
|---|---|
| **Description** | Specifies the VLAN ID for the network VLAN configuration (in CMC for iDRAC Enterprise on server modules). This property is only valid if **cfgNicVLanEnable** is set to **1** (enabled). |
| **Legal Values** | 1 – 4000 and 4021 – 4094 |
| **Default** | 1 |
| **Example** | `racadm config -g cfgLanNetworking -o cfgNicVlanID 1` |

## cfgDNSDomainNameFromDHCP (Read/Write)

| | |
|---|---|
| **Description** | Specifies that the DNS domain name should be assigned from the network DHCP server. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 0 |

This property is used only if `cfgNicUseDhcp` is set to 1 (true), or if both **cfgIPv6Enable** and **cfgIPv6AutoConfig** are set to 1 (true).

The CMC can obtain its DNS domain name from either a DHCP or DHCPv6 server, if all of the following properties are set to 1 (true):

- `cfgNicIPv4Enable`
- `cfgNicUseDhcp`
- `cfgIPv6Enable`
- `cfgIPv6AutoConfig`
- `cfgDNSDomainNameFromDHCP`
- `cfgDNSDomainName (Read/Write)`

The network administrator must make sure that these DHCP servers are configured to provide the same DNS domain name to the CMC, otherwise the domain name becomes unpredictable.

## cfgDNSDomainName (Read/Write)

| | |
|---|---|
| **Description** | This is the DNS domain name. This parameter is valid only if **cfgDNSDomainNameFromDHCP** is set to 0 (FALSE). |
| **Legal Values** | A string of up to 254 ASCII characters. At least one of the characters must be alphabetic. Characters are restricted to alphanumeric, '-', and '.'.<br>**NOTE:** Microsoft Active Directory supports only Fully Qualified Domain Names (FQDN) of 64 bytes or fewer. |
| **Default** | <*blank*> |

## cfgDNSRacName (Read/Write)

| | |
|---|---|
| **Description** | Displays the CMC name, which is rac-service tag by default. This parameter is only valid if **cfgDNSRegisterRac** is set to 1 (TRUE). |
| **Legal Values** | A string of up to 63 ASCII characters. At least one character must be alphabetic.<br>**NOTE:** Some DNS servers only register names of 31 characters or fewer. |
| **Default** | cmc-<*service tag*> |

## cfgDNSRegisterRac (Read/Write)

| | |
|---|---|
| **Description** | Registers the CMC name on the DNS server. When you set this parameter, the CMC registers its DNS name for its IPv4 and IPv6 addresses with the DNS server. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 0 |

**NOTE:** For IPv6, only the DHCPv6 address or static address is registered.

## cfgDNSServersFromDHCP (Read/Write)

| | |
|---|---|
| **Description** | Specifies if the DNS server IPv4 addresses should be assigned from the DHCP server on the network.<br>For CMC, this property is used only if **cfgNicUseDhcp** is set to 1 (true). |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 0 |

## cfgDNSServer1 (Read/Write)

| | |
|---|---|
| **Description** | Specifies the IPv4 address for DNS server 1. This property is only valid if **cfgDNSServersFromDHCP** is set to **0** (FALSE).<br>**NOTE:** cfgDNSServer1 and cfgDNSServer2 may be set to identical values while swapping addresses. |
| **Legal Values** | String representing a valid IPv4 address. For example: 192.168.0.20. |
| **Default** | 0.0.0.0 |

## cfgDNSServer2 (Read/Write)

| | |
|---|---|
| **Description** | Retrieves the IPv4 address for DNS server 2. This parameter is only valid if **cfgDNSServersFromDHCP** is set to 0 (FALSE).<br>**NOTE:** cfgDNSServer1 and cfgDNSServer2 may be set to identical values while swapping addresses. |
| **Legal Values** | String representing a valid IPv4 address. For example: 192.168.0.20. |
| **Default** | 0.0.0.0 |

## cfgNicEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables CMC network interface controller. If the NIC is disabled, the remote network interfaces to CMC are no longer accessible and CMC are only available through the local or serial RACADM interface. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 1 |

## cfgNicIpAddress (Read/Write)

| | |
|---|---|
| **Description** | Specifies the static IPv4 address to be assigned to the RAC or CMC.<br>**NOTE:** This parameter is only configurable if the **cfgNicUseDhcp** parameter is set to 0 (FALSE.) |
| **Legal Values** | String representing a valid IPv4 address. For example: 192.168.0.20. |
| **Default** | 192.168.0.120 |

## cfgNicNetmask (Read/Write)

| | |
|---|---|
| **Description** | The subnet mask used for CMC IP address.<br>This property is only valid if **cfgNicUseDhcp** is set to 0 (FALSE).<br>**NOTE:** This parameter is only configurable if the **cfgNicUseDhcp** parameter is set to 0 (FALSE). |
| **Legal Values** | String representing a valid subnet mask. For example: 255.255.255.0. |
| **Default** | 255.255.255.0 |

## cfgNicGateway (Read/Write)

| | |
|---|---|
| **Description** | CMC gateway IPv4 address.<br>The gateway IPv4 address used for static assignment of the RAC IP address. This property is only valid if **cfgNicUseDhcp** is set to 0 (FALSE).<br>**NOTE:** This parameter is only configurable if the **cfgNicUseDhcp** parameter is set to 0 (FALSE). |
| **Legal Values** | String representing a valid gateway IPv4 address. For example: 192.168.0.1. |
| **Default** | 192.168.0.1 |

### cfgNicMacAddress (Read Only)

| | |
|---|---|
| **Description** | The CMC NIC MAC address in the format: dd:dd:dd:dd:dd:dd, where d is a hexadecimal digit in range 0 - 9, A - F |
| **Legal Values** | String representing CMC NIC MAC address. |
| **Default** | The current MAC address of CMC NIC. For example, 00:12:67:52:51:A3. |

## cfgRemoteHosts

This group provides properties that allow configuration of the SMTP server for e-mail alerts.

This group enables/disables and configures firmware updates, NTP, remote syslogging, and SMTP email alerting.

Use this object with the `config` or `getconfig` subcommands.

To use this object property, you must have **Chassis Configuration Administrator** privilege.

The following sections provide information about the objects in the **cfgRemoteHosts** group.

### cfgRhostsFwUpdateTftpEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables CMC firmware update from a network TFTP server. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 1 |

### cfgRhostsFwUpdateIpAddr (Read/Write)

| | |
|---|---|
| **Description** | Specifies the network TFTP server IPv4 or IPv6 address that is used for TFTP CMC firmware update operations. |
| **Legal Values** | A string representing a valid IPv4 or IPv6 address. For example, `192.168.0.61` |
| **Default** | For IPv4, it is 0.0.0.0 |

### cfgRhostsFwUpdatePath (Read/Write)

| | |
|---|---|
| **Description** | Specifies TFTP path where CMC firmware image file exists on the TFTP server. The TFTP path is relative to the TFTP root path on the TFTP server.<br>**NOTE:** The server may still require you to specify the drive (for example, **C:**). |
| **Legal Values** | A string with a maximum length of 255 ASCII characters. |
| **Default** | <*blank*> |

## cfgRhostsSmtpServerIpAddr (Read/Write)

| | |
|---|---|
| **Description** | The IPv4 or IPv6 address of the network SMTP server. The SMTP server transmits e-mail alerts from CMC if the alerts are configured and enabled. |
| **Legal Values** | A string representing a valid SMTP server IPv4 or IPv6 address. For example: 192.168.0.55. |
| **Default** | localhost.localdomain |

## cfgRhostsNtpEnable

| | |
|---|---|
| **Description** | Enables or disables the use of the Network Time Protocol (NTP) for date and time synchronization. |
| **Legal Values** | • 1 (true)<br>• 0 (false) |
| **Default** | 0 |

## cfgRhostsNtpServer1

| | |
|---|---|
| **Description** | Specifies the first of three possible NTP servers. |
| **Legal Values** | A string representing a valid NTP server. For example, ntp1.ntp.net. At least one NTP server must be specified and duplicate entries are not allowed. |
| **Default** | Null |

## cfgRhostsNtpServer2

| | |
|---|---|
| **Description** | Specifies the second of three possible NTP servers. |
| **Legal Values** | A string representing a valid NTP server. For example, ntp2.ntp.net. At least one NTP server must be specified and duplicate entries are not allowed. |
| **Default** | Null |

## cfgRhostsNtpServer3

| | |
|---|---|
| **Description** | Specifies the third of three possible NTP servers. |
| **Legal Values** | A string representing a valid NTP server. For example, ntp3.ntp.net. At least one NTP server must be specified and duplicate entries are not allowed. |
| **Default** | Null |

## cfgRhostsNtpMaxDist

| | |
|---|---|
| **Description** | Specifies the NTP maximum distance parameter used to aid in NTP configuration. |
| **Legal Values** | 1–128 |
| **Default** | 16 |

## cfgRhostsSyslogEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables remote syslog to allow the RAC and SEL logs to be written to up to three remote syslog servers. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 0 |

## cfgRhostsSyslogPort (Read/Write)

| | |
|---|---|
| **Description** | Remote syslog port number to use for writing the RAC and SEL logs to a remote syslog server.<br>This setting takes effect only if the **cfgRhostsSyslogEnable** parameter is set to 1 (enabled). |
| **Legal Values** | 10–65535<br>**NOTE:** The following port numbers are reserved and cannot be used: 21, 68, 69, 123, 161, 546, 801, 4096, 5988, 5989, 6900, 9000, 60106. |
| **Default** | 514 |

## cfgRhostsSyslogServer1 (Read/Write)

| | |
|---|---|
| **Description** | Specifies the first of three possible remote syslog servers to store the RAC and SEL logs.This property is only valid if **cfgRhostsSyslogEnable** is set to 1 (enabled). |
| **Legal Values** | Valid hostname or IPv4 or IPv6 address. |
| **Default** | <*blank*> |

## cfgRhostsSyslogServer2 (Read/Write)

| | |
|---|---|
| **Description** | Specifies the second of three possible remote syslog servers to store the RAC and SEL logs. This property is only valid if **cfgRhostsSyslogEnable** is set to 1 (enabled). |
| **Legal Values** | Valid hostname or IPv4 or IPv6 address. |
| **Default** | <*blank*> |

### cfgRhostsSyslogServer3 (Read/Write)

| | |
|---|---|
| **Description** | Specifies the third of three possible remote syslog servers to store the RAC and SEL logs. This property is only valid if **cfgRhostsSyslogEnable** is set to 1 (enabled). |
| **Legal Values** | Valid hostname or IPv4 or IPv6 address. |
| **Default** | <*blank*> |

### cfgRhostsSyslogPowerLoggingEnabled

| | |
|---|---|
| **Description** | Enables or disables power consumption logging to remote syslog servers.<br>**NOTE:** Remote syslog must be enabled and one or more remote syslog servers must be configured for power consumption to be logged. |
| **Legal Values** | • 1 (enabled)<br>• 0 (disabled) |
| **Default** | 0 |

### cfgRhostsSyslogPowerLoggingInterval

| | |
|---|---|
| **Description** | Specifies the power consumption collection/logging interval. |
| **Legal Values** | 1–1440 (minutes) |
| **Default** | 5 |

**Example**

```
racadm getconfig -g cfgRemoteHosts [-m server-<n>]

cfgRhostsFwUpdateTftpEnable=1
cfgRhostsFwUpdateIpAddr=0.0.0.0
cfgRhostsFwUpdatePath=
cfgRhostsSmtpServerIpAddr=localhost.localdomain
cfgRhostsNtpEnable=0
cfgRhostsNtpServer1=
cfgRhostsNtpServer2=
cfgRhostsNtpServer3=
cfgRhostsNtpMaxDist=16
cfgRhostsSyslogEnable=0
cfgRhostsSyslogPort=514
cfgRhostsSyslogServer1=
cfgRhostsSyslogServer2=
cfgRhostsSyslogServer3=cfgRhostsSyslogPowerLoggingEnabled=1
cfgRhostsSyslogPowerLoggingInterval=5
```

# cfgUserAdmin

This group provides configuration information about the users who are allowed to access CMC through the available remote interfaces.

Up to 16 instances of the user group are allowed. Each instance represents the configuration for an individual user.

**NOTE:** In the current CMC firmware version, the objects `cfgUserAdminEnable` and `cfgUserAdminPrivilege` are interrelated; changing the value of one property causes the value of the other property to change. For example, if a user does not have login privilege, the user is disabled by default. When you enable the user by changing the value of `UserAdminEnable` to 1, the right most digit of the `UserAdminPrivilege` also becomes 1. On the other hand, if you change the right-most digit of the `UserAdminPrivilege` to 0, the value of `UserAdminEnable` becomes 0.

Use this object with the `config` or `getconfig` subcommands. You must supply an index group number to use these commands as follows: -i <index group>

To use this object property, you must have the **Chassis Configuration Administrator** privilege.

**NOTE:** You can configure any setting that is not preceded by the hash sign (#) in the output. To modify a configurable object, use the -o option.

The following sections provide information about the objects in the **cfgUserAdmin** group.

## cfgUserAdminIndex (Read Only)

| | |
|---|---|
| **Description** | The unique index of a user.<br>The index number is used to specify a unique group name. Only valid for indexed groups. |
| **Legal Values** | The parameter is specified by a decimal integer from 1–16. |
| **Default** | *<index of the instance>* |

## cfgUserAdminPrivilege (Read/Write)

| | |
|---|---|
| **Description** | This property specifies the role-based authority privileges allowed for the user. The value is represented as a bit mask that allows for any combination of privilege values. The table below describes the user privilege bit values that can be combined to create bit masks. |
| **Legal Values** | 0x0000000-0x0000fff, and 0x0 |
| **Default** | 0x00000000 |

**Example**

```
racadm getconfig -g cfgUserAdmin -i 1

# cfgUserAdminIndex=1
cfgUserAdminEnable=1
cfgUserAdminUserName=root
# cfgUserAdminPassword=******** (Write-Only)
cfgUserAdminPrivilege=0x00000fff
```

The following table lists the bit masks for user priveleges.

| iDRAC Specific User Privilege | Privilege Bit Mask |
|---|---|
| Login to iDRAC | 0x00000001 |
| Configure iDRAC | 0x00000002 |
| Configure Users | 0x00000004 |
| Clear Logs | 0x00000008 |
| Execute Server Control Commands | 0x00000010 |

| | |
|---|---|
| Access Virtual Console | 0x00000020 |
| Access Virtual Media | 0x00000040 |
| Test Alerts | 0x00000080 |
| Execute Debug Commands | 0x00000100 |
| **CMC Specific User Privilege** | |
| CMC Login User | 0x0000001 |
| Chassis Configuration Administrator | 0x0000002 |
| User Configuration Administrator | 0x0000004 |
| Clear Logs Administrator | 0x0000008 |
| Chassis Control Administrator | 0x0000010 |
| Super User | 0x0000020 |
| Server Administrator | 0x0000040 |
| Test Alert User | 0x0000080 |
| Debug Command Administrator | 0x0000100 |
| Fabric A Administrator | 0x0000200 |
| Fabric B Administrator | 0x0000400 |
| Fabric C Administrator | 0x0000800 |

**Examples**

The following table provides sample privilege bit masks for users with one or more privileges.

| User Privilege(s) | Privilege Bit Mask |
|---|---|
| The user is not allowed to access CMC. | 0x00000000 |
| The user may only log in to CMC and view CMC and server configuration information. | 0x00000001 |
| The user may log in to CMC and change configuration. | 0x00000001 + 0x00000002 = 0x00000003 |
| The user may log in, access Virtual Media, and Virtual Console. | 0x00000001 + 0x00000040 + 0x00000080 = 0x000000C1 |

## cfgUserAdminUserName (Read/Write)

**Description**

The name of the user for this index. The user index is created by writing a string into this name field if the index is empty. Writing a string of double quotation marks ("") deletes the user at that index. You cannot change the name. You must delete and then recreate the name. The string cannot contain / (forward slash), \ (backslash), . (period), @ (at symbol) or quotation marks.

**NOTE:** This property value must be unique among user names.

**Legal Values**

A string of up to 16 ASCII characters.

**Default**

- root (User 2)
- <*blank*> (All others)

### cfgUserAdminPassword (Write Only)

| | |
|---|---|
| **Description** | The password for this user. User passwords are encrypted and cannot be seen or displayed after the property is written. |
| **Legal Values** | A string of up to 20 ASCII characters. |
| **Default** | ******** |

### cfgUserAdminEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables an individual user.<br>**NOTE:** You can enable a user for a given index, only if you set the password for the same user. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 0 |

## cfgEmailAlert

This group contains parameters to configure e-mail alerting capabilities. Up to four instances of this group are allowed.

Use this object with the `getconfig` and `config` subcommands.

To use this object property, you must have **Chassis Configuration Administrator** privileges.

**NOTE:** You can configure any setting that is not preceded by the hash sign (#) in the output. To modify a configurable object, use the **-o** option.

The following sections provide information about the objects in the **cfgEmailAlert** group.

### cfgEmailAlertIndex (Read Only)

| | |
|---|---|
| **Description** | The unique index of an alert instance. |
| **Legal Values** | 1-4 |
| **Default** | <*instance*> |

### cfgEmailAlertEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables the alert instance. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 0 |

### cfgEmailAlertAddress (Read/Write)

| | |
|---|---|
| **Description** | Specifies the destination email address for email alerts, for example, user1@company.com. |
| **Legal Values** | E-mail address format, with a maximum length of 64 ASCII characters. |
| **Default** | <*blank*> |

### cfgEmailAlertEmailName

| | |
|---|---|
| **Description** | Specifies name or other identifier associated with the destination e-mail address. The e-mail name can refer to an individual, group, location, department, and so on. |
| **Legal Values** | A string of up to 32 characters |
| **Default** | <*blank*> |

**Example**

```
racadm getconfig -g cfgEmailAlert -i 2

# cfgEmailAlertIndex=1
cfgEmailAlertEnable=1
cfgEmailAlertAddress=kfulton@dell.com
cfgEmailAlertName=Kevin Fulton
```

## cfgSessionManagement

This group contains parameters to configure the number of sessions that can connect to CMC. One instance of the group is allowed. Displays current settings for and configures idle timeout properties for Web server, Telnet, SSH, and RACADM sessions. Changes to idle timeout settings take effect at the next login. To disable idle timeout for a connection, set this property to 0.

The following sections provide information about the objects in the **cfgSessionManagement** group.

### cfgSsnMgtRacadmTimeout (Read/Write)

| | |
|---|---|
| **Description** | Defines the idle timeout in seconds for the Remote RACADM interface. If a remote RACADM session remains inactive for more than the specified timeout, the session is automatically ended. |
| **Legal Values** | 0, 10 –1920 |
| **Default** | iDRAC - 60<br>CMC - 30 |

**Example**

```
racadm getconfig -g cfgSessionManagement cfgSsnMgtWebserverTimeout=0
cfgSsnMgtTelnetIdleTimeout=0
cfgSsnMgtSshIdleTimeout=300
cfgSsnMgtRacadmTimeout=0
```

### cfgSsnMgtWebserverTimeout (Read/Write)

| | |
|---|---|
| **Description** | Defines the Web server time-out. This property sets the amount of time (in seconds) that a connection is allowed to remain idle (there is no user input). The session is cancelled if the time limit set by this property is reached. Changes to this setting do not affect the current session. You must log out and log in again to make the new settings effective.<br>An expired Web server session logs out the current session. |
| **Legal Values** | 60 – 10800 |
| **Default** | 1800 |

## cfgSerial

This group contains configuration parameters for CMC services. One instance of the group is allowed.

Use this object with the `getconfig` or `config` subcommands.

To use this object property, you must have the **Chassis Configuration Administrator** privilege.

The following sections provide information about the objects in the **cfgSerial** group.

**NOTE:** The **cfgSerial** object group is applicable for iDRAC Enterprise on server modules for only two properties—**cfgSerialTelnetEnable=1** and **cfgSerialSshEnable=1**.

### cfgSerialBaudRate (Read/Write)

| | |
|---|---|
| **Description** | Sets the baud rate on the serial port. |
| **Legal Values** | 2400, 4800, 9600, 19200, 28800, 38400, 57600,115200 |
| **Default** | 115200 |

### cfgSerialConsoleEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables the RAC or CMC serial console interface. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 1 |

### cfgSerialConsoleIdleTimeout (Read/Write)

| | |
|---|---|
| **Description** | The maximum number of seconds to wait before an idle serial session is disconnected. |
| **Legal Values** | • 0 = No timeout<br>• 60 – 10800 |
| **Default** | 1800 |

## cfgSerialConsoleNoAuth (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables the RAC or CMC serial console login authentication. |
| **Legal Values** | • 0 (enables serial login authentication)<br>• 1 (disables serial login authentication) |
| **Default** | 0 |

## cfgSerialConsoleCommand (Read/Write)

| | |
|---|---|
| **Description** | Specifies a serial command that is executed after a user logs into the serial console interface. |
| **Legal Values** | A string representing a valid serial command. For example, `connect server-1`. |
| **Default** | <*blank*> |

## cfgSerialConsoleColumns

| | |
|---|---|
| Description | Specifies the number of columns in the terminal window command line connected to the serial port. You must log out, then log in again for the changes to take effect.<br>**NOTE:** The prompt counts as two characters.<br>**NOTE:** The terminal emulator must be configured with the line wrap mode ON, if a terminal emulator is used. |
| Legal Values | 0–256 |
| Default | 0 (equivalent to 80) |

## cfgSerialHistorySize (Read/Write)

| | |
|---|---|
| **Description** | Specifies the maximum size of the serial history buffer. |
| **Legal Values** | 0 – 8192 |
| **Default** | 8192 |

## cfgSerialSshEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables the secure shell (SSH) interface on CMC. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 1 |

**Example**

```
racadm getconfig -g cfgSerial

cfgSerialBaudRate=115200
cfgSerialConsoleEnable=1
cfgSerialConsoleQuitKey=^\
cfgSerialConsoleIdleTimeout=1800
cfgSerialConsoleNoAuth=0
cfgSerialConsoleCommand=
cfgSerialConsoleColumns=0
cfgSerialHistorySize=8192
cfgSerialTelnetEnable=0
cfgSerialSshEnable=1
```

### cfgSerialTelnetEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables the Telnet console interface on CMC. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 0 |

## cfgOobSnmp

This group contains parameters to configure the SNMP agent and trap capabilities of CMC. One instance of the group is allowed.

The CMC SNMP agent supports the standard RFC1213 mib-2, and the Dell enterprise-specific MIB.

Use this object with the config or getconfig subcommands.

To use this object property, you must have **Chassis Configuration Administrator** privilege.

**NOTE:** You can configure any setting that is not preceded by the hash sign (#) in the output. To modify a configurable object, use the **-o** option.

The following sections provide information about the objects in the **cfgOobSnmp** group.

### cfgOobSnmpAgentCommunity (Read/Write)

| | |
|---|---|
| **Description** | Specifies the SNMP Community Name (identical to community string) used for SNMP traps. The community string acts as a password shared between different hosts over the network. This community string value must match with that of the other hosts for any kind of communication through SNMP. |
| **Legal Values** | A string of up to 31 characters. |
| **Default** | public |

**Example**

```
racadm getconfig -g cfgOobSnmp

cfgOobSnmpTrapsEnable=1
cfgOobSnmpAgentCommunity=public
```

### cfgOobSnmpAgentEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables the SNMP agent. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 0 |

## cfgTraps

This group displays information for and configures delivery of SNMP traps for a specific user.

This object property is applicable only to CMC. Use this object with the **config** or **getconfig** subcommands.

To use this object property, you must have **Chassis Configuration Administrator** privilege.

**NOTE:** You can configure any setting that is not preceded by the hash sign (#) in the output. To modify a configurable object, use the **-o** option.

### cfgTrapsIndex (Read Only)

| | |
|---|---|
| **Description** | Indicates the unique index of an alert instance. |
| **Legal Values** | 1 - 4 |
| **Default** | 1 |

### cfgTrapsEnable

| | |
|---|---|
| **Description** | Enables or disables event traps. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | None |

### cfgTrapsAlertDestIpAddr

| | |
|---|---|
| **Description** | Sets the IP address that receives the alert. |
| **Legal Values** | A string representing a valid IP address. For example, 192.168.0.20. |
| **Default** | None |

### cfgTrapsCommunityName

| | |
|---|---|
| **Description** | Sets the community string (identical to the community name) used for authentication. The community string acts as a password shared between different hosts over the network. This community string value must match with |

| | |
|---|---|
| | that of the other hosts for any kind of communication through SNMP. |
| **Legal Values** | A string representing the community name. |
| **Default** | None |

**Example**

```
racadm getconfig -g cfgTraps -i 2

# cfgTrapsIndex=2
cfgTrapsEnable=1
cfgTrapsAlertDestIpAddr=
cfgTrapsCommunityName=public
```

# cfgRacTuning

This group is used to configure various iDRAC or CMC configuration properties, such as valid ports and security port restrictions.

Use this object with the config or getconfig subcommands.

To use this object property for CMC, you must have **Chassis Configuration Administrator** privilege.

**NOTE:** For CMC, you can configure any setting that is not preceded by the hash sign (#) in the output. To modify a configurable object, use the **-o** option.

Use the **-m** option to apply this setting to iDRAC.

The following sections provide information about the objects in the **cfgRacTuning** group.

## cfgRacTuneDefCredentialWarningEnable

Use this object with the `getconfig` or `config` subcommands.

| | |
|---|---|
| **Description** | Enables or disables the display of the default password warning message. |
| **Legal Values** | 0 and 1 |
| **Default** | 1 |

## cfgRacTuneRemoteRacadmEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables the Remote RACADM interface. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 1 |

## cfgRacTuneHttpPort (Read/Write)

| | |
|---|---|
| **Description** | Specifies the port number to use for HTTP network communication. |
| **Legal Values** | 10–65535 |

**NOTE:** The following port numbers are reserved and cannot be used: 21, 68, 69, 123, 161, 546, 801, 4096, 5988, 5989, 6900, 9000, 60106.

**Default** 80

## cfgRacTuneHttpsPort (Read/Write)

**Description** Specifies the port number to use for HTTPS network communication with.

**Legal Values** 10–65535

**NOTE:** The following port numbers are reserved and cannot be used: 21, 68, 69, 123, 161, 546, 801, 4096, 5988, 5989, 6900, 9000, 60106.

**Default** 443

## cfgRacTuneIpRangeEnable (Read/Write)

**Description** Enables or disables the IPv4 Address Range validation feature.

**Legal Values**

- 1 (TRUE)
- 0 (FALSE)

**Default** 0

## cfgRacTuneIpRangeAddr (Read/Write)

**Description** Specifies the acceptable IPv4 address bit pattern in positions determined by the 1s in the range mask property (**cfgRacTuneIpRangeMask**).

A login from the incoming IP address is allowed only if the following are identical:

- `cfgRacTuneIpRangeMask` bit-wise and with incoming IP address
- `cfgRacTuneIpRanbeMask` bit-wise and with `cfgRacTuneIpRangeAddr`.

**Legal Values** An IPv4 address formatted string, for example, 192.168.0.44.

**Default** 192.168.1.1

## cfgRacTuneIpRangeMask (Read/Write)

**Description** Standard IP mask values with left-justified bits. For example, 255.255.255.0.

| | |
|---|---|
| | A login from the incoming IP address is allowed only if both of the following are identical:<br>• `cfgRacTuneIpRangeMask` bit-wise and with incoming IP address<br>• `cfgRacTuneIpRanbeMask` bit-wise and with `cfgRacTuneIpRangeAddr`. |
| **Legal Values** | An IPv4 address formatted string, for example, 255.255.255.0. |
| **Default** | 255.255.255.0 |

## cfgRacTuneIpBlkEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables the IPv4 address blocking feature. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 0 |

## cfgRacTuneIpBlkFailCount (Read/Write)

| | |
|---|---|
| **Description** | The maximum number of login failures to occur within the window (cfgRacTuneIpBlkFailWindow) before login attempts from the IP address are rejected. |
| **Legal Values** | 2 – 16 |
| **Default** | 5 |

## cfgRacTuneIpBlkFailWindow (Read/Write)

| | |
|---|---|
| **Description** | Defines the time span in seconds that the failed attempts are counted. When failure attempts age beyond this limit, they are dropped from the count. |
| **Legal Values** | 2–65535 |
| **Default** | 60 |

## cfgRacTuneIpBlkPenaltyTime (Read/Write)

| | |
|---|---|
| **Description** | Defines the time span in seconds that session requests from an IP address with excessive failures are rejected. |
| **Legal Values** | 2–65535 |
| **Default** | 300 |

## cfgRacTuneSshPort (Read/Write)

| | |
|---|---|
| **Description** | Specifies the port number used for the SSH interface. |
| **Legal Values** | 10–65535 |

| | |
|---|---|
| **Default** | 22 |

## cfgRacTuneTelnetPort (Read/Write)

| | |
|---|---|
| **Description** | Specifies the port number used for iDRAC or CMC Telnet interface.<br>**NOTE:** For CMC, the following port numbers are reserved and cannot be used: 21, 68, 69, 123, 161, 546, 801, 4096, 5988, 5989, 6900, 9000, 60106. |
| **Legal Values** | • For iDRAC: 1 – 65535<br>• For CMC: 10 – 65535 |
| **Default** | 23 |

## cfgRacTuneDaylightOffset (Read Only)

| | |
|---|---|
| **Description** | Specifies the daylight savings offset (in minutes) to use for the RAC Time. This value is 0 if the time zone is not a Daylight Saving time zone. |
| **Legal Values** | 0 – 60 |
| **Default** | 0 |

### Example

```
racadm getconfig -g cfgRacTuning [-m server-<n>] -o
<object name> <object value>

cfgRacTuneRemoteRacadmEnable=1
cfgRacTuneWebserverEnable=1
cfgRacTuneHttpPort=80
cfgRacTuneHttpsPort=443
cfgRacTuneTelnetPort=23
cfgRacTuneSshPort=22
cfgRacTuneIpRangeEnable=0
cfgRacTuneIpRangeAddr=192.168.1.1
cfgRacTuneIpRangeMask=255.255.255.0
cfgRacTuneIpBlkEnable=0
cfgRacTuneIpBlkFailCount=5
cfgRacTuneIpBlkFailWindow=60
cfgRacTuneIpBlkPenaltyTime=300
# cfgRacTuneTimezoneOffset=-18000
# cfgRacTuneDaylightOffset=3600
```

## cfgRacTuneTimezoneOffset (Read Only)

| | |
|---|---|
| **Description** | Specifies the time zone offset (in minutes) from Greenwich Mean Time (GMT)/Coordinated Universal Time (UTC) to use for the RAC Time. Some common time zone offsets for time zones in the United States are:<br>• –480 (PST—Pacific Standard Time)<br>• –420 (MST—Mountain Standard Time)<br>• –360 (CST—Central Standard Time)<br>• –300 (EST—Eastern Standard Time) |

| | |
|---|---|
| | For CMC: This object property is read only. Specifies the difference in number of seconds, from the UTC/GMT. This value is negative if the current time zone is west of Greenwich. |
| **Legal Values** | –720 to 7800 |
| **Default** | 0 |

**Example**

```
racadm getconfig -g cfgRacTuning

cfgRacTuneRemoteRacadmEnable=1
cfgRacTuneWebserverEnable=1
cfgRacTuneHttpPort=80
cfgRacTuneHttpsPort=443
cfgRacTuneTelnetPort=23
cfgRacTuneSshPort=22
cfgRacTuneIpRangeEnable=0
cfgRacTuneIpRangeAddr=192.168.1.1
cfgRacTuneIpRangeMask=255.255.255.0
cfgRacTuneIpBlkEnable=0
cfgRacTuneIpBlkFailCount=5
cfgRacTuneIpBlkFailWindow=60
cfgRacTuneIpBlkPenaltyTime=300
# cfgRacTuneTimezoneOffset=-18000
# cfgRacTuneDaylightOffset=3600
```

### cfgRacTuneWebserverEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables the Web server. If this property is disabled, CMC is not accessible using client Web browsers. This property has no effect on the Telnet/SSH or RACADM interfaces. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 1 |

## cfgServerInfo

For iDRAC this group allows you to select the BIOS first boot device and provides the option to boot the selected device only once.

For CMC, this group allows you to displays information for and configure a server in the chassis.

Use this object with the config or getconfig subcommands.

To use this object property for CMC, you must have **Chassis Configuration Administrator** privilege.

**NOTE:** For CMC, you can configure any setting that is not preceded by the hash sign (#) in the output. To modify a configurable object, use the -o option

The following sections provide information about the objects in the **cfgServerInfo** group.

### cfgServerInfoIndex (Read Only)

| | |
|---|---|
| **Description** | Displays the index name of the server. |
| **Legal Values** | None |

| | |
|---|---|
| **Default** | None |

## cfgServerSlotNumber (Read Only)

| | |
|---|---|
| **Description** | Specifies the location of the specified server (1–4) in the chassis. |
| **Legal Values** | None |
| **Default** | None |

## cfgServerServiceTag (Read Only)

| | |
|---|---|
| Description | Displays the service tag of the specified server. |
| Legal Values | None |
| Default | None |

## cfgServerName (Read/Write)

| | |
|---|---|
| **Description** | Displays the name of the specified server. |
| **Legal Values** | Maximum of 15 non-extended ASCII characters, (ASCII codes 32–126). For more information, see Guidelines to Quote Strings Containing Special Characters when Using RACADM Commands. |
| **Default** | SLOT - <*slot number*> |

## cfgServerFW (Read Only)

| | |
|---|---|
| **Description** | Displays the server's iDRAC management firmware revision. |
| **Legal Values** | None |
| **Default** | None |

## cfgServerBIOS (Read Only)

| | |
|---|---|
| **Description** | Displays the server's BIOS revision. |
| **Legal Values** | None |
| **Default** | None |

## cfgServerBmcMacAddress (Read Only)

| | |
|---|---|
| **Description** | Displays the BMC MAC address of the specified server. |
| **Legal Values** | None |
| **Default** | None |

## cfgServerNic1MacAddress (Read Only)

| | |
|---|---|
| **Description** | Displays the MAC address of the server NIC 1. |
| **Legal Values** | None |
| **Default** | None |

## cfgServerNic2MacAddress (Read Only)

| | |
|---|---|
| **Description** | Displays the MAC address of the server NIC 2. |
| **Legal Values** | None |
| **Default** | None |

## cfgServerNic3MacAddress (Read Only)

| | |
|---|---|
| **Description** | Displays the MAC address of the server NIC 3. |
| **Legal Values** | None |
| **Default** | None |

## cfgServerNic4MacAddress (Read Only)

| | |
|---|---|
| **Description** | Displays the MAC address of the server NIC 4. |
| **Legal Values** | None |
| **Default** | None |

## cfgServerPriority (Read/Write)

| | |
|---|---|
| **Description** | Sets the priority level allotted to the server in the chassis for power budgeting purposes. |
| **Legal Values** | 1–9 in descending priority, where 1 holds the highest priority |
| **Default** | 1 |

## cfgServerNicEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables LAN channel. |
| **Legal Values** | • 1 (Enable)<br>• 0 (Disable) |
| **Default** | None |

## cfgServerIPMIOverLanEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables IPMI LAN channel. |
| **Legal Values** | • 1 (enable)<br>• 0 (disable) |
| **Default** | None |

## cfgServerPowerBudgetAllocation (Read Only)

| | |
|---|---|
| **Description** | Displays the current power allocation for the server. |
| **Legal Values** | • 1 (Enable)<br>• 0 (Disable) |
| **Default** | None |

## cfgServerDNSRegisterIMC (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables DNS name registration for the Integrated System (iDRAC). |
| **Legal Values** | • 1 (enable)<br>• 0 (disable) |
| **Default** | None |

## cfgServerDNSIMCName (Read/Write)

| | |
|---|---|
| **Description** | Displays the DNS domain name for the integrated Remote Access Controller (iDRAC.) |
| **Legal Values** | None |
| **Default** | None |

## cfgServerRootPassword (Write Only)

| | |
|---|---|
| **Description** | Displays the password for iDRAC as a series of asterisks (*). It cannot be seen or displayed after this property is written. |
| **Legal Values** | None |
| **Default** | None |

## cfgServerFirstBootDevice (Read/Write)

| | |
|---|---|
| **Description** | Sets or displays the first boot device.<br>This object is read-write. |

**NOTE:** For a vFlash Partition to be configured as First Boot Device, it has to be attached first. When a detached or non-existent VFlash partition or a non-standard boot device is configured as first boot device, the following error message is displayed:

```
Invalid object value
```

**Legal Values**

- 0–default
- 4–PXE
- 8–HDD
- 20–DIAG
- 28–CD-DVD
- 32–BIOS
- 36–vFDD
- 40–VCD-DVD
- 44–iSCSI
- 60–VFLASH partition label

**Default** 0 (zero)

## cfgServerBootOnce (Read/Write)

**Description** Enables or disables the server boot once feature. This object is read-write.

**Legal Values**

- 1 = TRUE
- 0 = FALSE

**Default** 0

## cfgServerPowerConsumption (Read Only)

**Description** Displays the current power consumption for a server.

**Legal Values** None

**Default** None

**Example**

```
racadm getconfig -g cfgServerInfo -i 8
# cfgServerInfoIndex=8
# cfgServerSlotNumber=8
# cfgServerServiceTag=
cfgServerName=SLOT-08
# cfgServerFW=3.0
# cfgServerBIOS=
# cfgServerBmcMacAddress=00:21:9B:FE:5F:58
# cfgServerNic1MacAddress=00:0D:56:B8:69:63
# cfgServerNic2MacAddress=00:0D:56:B8:69:65
# cfgServerNic3MacAddress=00:0D:56:B8:69:CB
# cfgServerNic4MacAddress=00:0D:56:B8:69:CD
```

```
cfgServerPriority=1
cfgServerNicEnable=1
cfgServerIPMIOverLANEnable=1
# cfgServerPowerBudgetAllocation=0
cfgServerDNSRegisterIMC=0
cfgServerDNSIMCName=iDRAC-
cfgServerRootPassword=******** (Write-Only)
cfgServerFirstBootDevice=0
# cfgServerBootOnce=1
# cfgServerPowerConsumption=0
racadm getconfig -g cfgServerInfo -i 1
# cfgServerInfoIndex=1
# cfgServerSlotNumber=1
# cfgServerServiceTag=1S0M0G1
cfgServerName=SLOT-01
# cfgServerFW=1.40 (Build 12)
# cfgServerBIOS=4.0.2
# cfgServerBmcMacAddress=00:18:8B:FF:41:43
# cfgServerNic1MacAddress=00:1A:A0:FF:D9:F4
# cfgServerNic2MacAddress=00:1A:A0:FF:D9:F6
cfgServerPriority=1
cfgServerNicEnable=1
cfgServerIPMIOverLANEnable=1
# cfgServerPowerBudgetAllocation=0
cfgServerDNSRegisterIMC=0
cfgServerDNSIMCName=iDRAC-1S0M0G1
cfgServerRootPassword=******** (Write-Only)
cfgServerFirstBootDevice=0
# cfgServerBootOnce=1
# cfgServerPowerConsumption=0
```

# cfgActiveDirectory

This group contains parameters to configure the Active Directory feature.

Use this object with the `getconfig` or `config` subcommands.

To use this object property, you must have the **Chassis Configuration Administrator** privilege.

**NOTE:** You can configure any setting that is not preceded by the hash sign (#) in the output. To modify a configurable object, use the **-o** option.

The following sections provide information about the objects in the **cfgActiveDirectory** group.

## cfgADRacName (Read/Write)

| | |
|---|---|
| **Description** | Name of CMC as recorded in the Active Directory forest. |
| **Legal Values** | Any printable text string of up to 254 characters, with no white space. |

| | |
|---|---|
| **Default** | *<blank>* |

## cfgADCertValidationEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables Active Directory certificate validation as a part of the Active Directory configuration process. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 1 |

## cfgADRacDomain (Read/Write)

| | |
|---|---|
| **Description** | Active Directory Domain in which CMC resides. |
| **Legal Values** | Any printable text string of up to 254 characters, with no white space. |
| **Default** | 1 |

## cfgADRootDomain (Read/Write)

| | |
|---|---|
| **Description** | Specifies the root domain of the domain forest. |
| **Legal Values** | Any printable text string of up to 254 characters, with no white space. |
| **Default** | *<blank>* |

## cfgADEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables Active Directory user authentication on CMC.<br>If this property is disabled, LDAP authentication may be used for user login. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 0 |

## cfgADAuthTimeout (Read/Write)

| | |
|---|---|
| **Description** | Specifies the number of seconds to wait for Active Directory authentication requests to complete before timing out.<br>**NOTE:** To modify this property, you must have the **Configure CMC** privilege. |
| **Legal Values** | 15–300 seconds |
| **Default** | 120 |

## cfgADSCLEnable

| | |
|---|---|
| **Description** | Enables you to log on to the CMC without enabling the Smart Card login. |
| **Legal Values** | • 1 (Enable)<br>• 0 (Disable) |
| **Default** | 0 |

## cfgADSSOEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables Active Directory single sign-on authentication on CMC. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 0 |

## cfgADDomainController1 (Read/Write)

| | |
|---|---|
| **Description** | Specifies the LDAP server from which you want the CMC to obtain user names . |
| **Legal Values** | A string of up to 254 ASCII characters representing a valid IP address or a fully qualified domain name (FQDN). |
| **Default** | None |

## cfgADDomainController2 (Read/Write)

| | |
|---|---|
| **Description** | Specifies the LDAP server from which you want the CMC to obtain user names . |
| **Legal Values** | A string of up to 254 ASCII characters representing a valid IP address or a fully qualified domain name (FQDN). |
| **Default** | None |

## cfgADDomainController3 (Read/Write)

| | |
|---|---|
| **Description** | Specifies the LDAP server from which you want the CMC to obtain user names . |
| **Legal Values** | A string of up to 254 ASCII characters representing a valid IP address or a fully qualified domain name (FQDN). |
| **Default** | None |

## cfgADGlobalCatalog1 (Read/Write)

| | |
|---|---|
| **Description** | Specifies the Global Catalog server from which you want the CMC to obtain user names. |
| **Legal Values** | A string of up to 254 ASCII characters representing a valid IP address or a fully qualified domain name (FQDN). |
| **Default** | None |

## cfgADGlobalCatalog2 (Read/Write)

| | |
|---|---|
| **Description** | Specifies the Global Catalog server from which you want the CMC to obtain user names. |
| **Legal Values** | A string of up to 254 ASCII characters representing a valid IP address or a fully qualified domain name (FQDN). |
| **Default** | None |

## cfgADGlobalCatalog3 (Read/Write)

| | |
|---|---|
| **Description** | Specifies the Global Catalog server from which you want the CMC to obtain user names. |
| **Legal Values** | A string of up to 254 ASCII characters representing a valid IP address or a fully qualified domain name (FQDN). |
| **Default** | None |

## cfgADType (Read/Write)

| | |
|---|---|
| **Description** | Determines the schema type to use with Active Directory. |
| **Legal Values** | • 1 (Enables Active Directory with the extended schema)<br>• 2 (Enables Active Directory with the standard schema) |
| **Default** | 1 |

## cfgADDcSRVLookupbyUserdomain (Read/Write)

| | |
|---|---|
| **Description** | Chooses the way the user domain is looked up for Active Directory. |
| **Legal Values** | • 1 (TRUE)—use user domain as the search domain to look up DCs. The user domain is chosen from the user domain list or entered by the login user.<br>• 0 (FALSE)—use the configured search domain **cfgADDcSrvLookupDomainName** to look up DCs. |
| **Default** | 1 |

## cfgADDcSRVLookupDomainName (Read/Write)

| | |
|---|---|
| **Description** | This is the Active Directory Domain to use when **cfgAddcSrvLookupbyUserDomain** is set to **0**. |
| **Legal Values** | String. Maximum length = 254 |
| **Default** | Null |

## cfgADDcSRVLookupEnable (Read/Write)

| | |
|---|---|
| **Description** | Configures CMC to use pre-configured domain controllers or to use DNS to find the domain controller. If using pre-configured domain controllers, then the domain controllers to use are specified under **cfgAdDomainController1**, **cfgAdDomainController2**, and **cfgAdDomainController3**. CMC does not fail over to the specified domain controllers when DNS lookup fails or none of the servers returned by the DNS lookup works. |
| **Legal Values** | • 1 (TRUE)—use DNS to look up domain controllers<br>• 0 (FALSE)—use pre-configured domain controllers |
| **Default** | 0 |

## cfgADGcRootDomain (Read/Write)

| | |
|---|---|
| **Description** | The name of the Active Directory root domain used for DNS look up, to locate Global Catalog servers. |
| **Legal Values** | String. Maximum character length = 254 |
| **Default** | Null |

## cfgADGcSRVLookupEnable (Read/Write)

| | |
|---|---|
| **Description** | Determines how the global catalog server is looked up. If using pre-configured global catalog servers, then CMC uses the values **cfgAdGlobalCatalog1**, **cfgAdGlobalCatalog2**, and **cfgAdGlobalCatalog3**. |
| **Legal Values** | • 0(FALSE)—use pre-configured Global Catalog Servers (GCS)<br>• 1(TRUE)—use DNS to look up GCS |
| **Default** | 0 |

## cfgADSpecifyServerEnable

| | |
|---|---|
| **Description** | Allows you to enable or disable and specify an LDAP server or a global catalog server. Use |

| | |
|---|---|
| | **cfgADDomainController** or **cfgADGlobalCatalog** to specify the IP address. |
| **Legal Values** | • 1 (enabled)<br>• 0 (disabled) |
| **Default** | 0 |

# cfgLDAP

This group allows you to configure settings related to the Lightweight Directory Access Protocol (LDAP).

Use this object with the **config** or **getconfig** subcommands.

To use this object property for CMC, you must have the **Chassis Configuration Administrator** privilege.

**NOTE:** For CMC, you can configure any setting that is not preceded by the hash sign (#) in the output. To modify a configurable object, use the **-o** option.

The following sections provide information about the objects in the **cfgLDAP** group.

## cfgLDAPEnable (Read/Write)

| | |
|---|---|
| **Description** | Turns LDAP service on or off.<br>If this property is disabled, local CMC authentication is used for user logins.<br>**NOTE:** For CMC, enabling this option turns off **cfgADEnable**. |
| **Legal Values** | • 1 (TRUE)— Enable<br>• 0 (FALSE)— Disable |
| **Default** | 0 |

## cfgLDAPServer (Read/Write)

| | |
|---|---|
| **Description** | Configures the address of the LDAP Server. IPv4 and IPv6 are supported.<br>**NOTE:** You can specify multiple servers by separating each server with a comma. For example, example.com, sub1.example.com |
| **Legal Values** | String.<br>Maximum length = 254 |
| **Default** | Null |

## cfgLDAPPort (Read/Write)

| | |
|---|---|
| **Description** | Port of LDAP over SSL. Non-SSL port is not supported. |
| **Legal Values** | 1 - 65535 |
| **Default** | 636 |

## cfgLDAPBasedn (Read/Write)

| | |
|---|---|
| **Description** | The Domain Name of the branch of the directory where all searches should start from. |
| **Legal Values** | String. Maximum length = 254 |
| **Default** | Null |

## cfgLDAPUserAttribute (Read/Write)

| | |
|---|---|
| **Description** | Specifies the user attribute to search for. It is recommended to be unique within the chosen baseDN, otherwise a search filter must be configured to make sure the uniqueness of the login user. If the userDN cannot be uniquely identified, login fails with error. |
| **Legal Values** | String. Maximum length = 254 |
| **Default** | Null<br>*uid* if not configured. |

## cfgLDAPGroupAttribute (Read/Write)

| | |
|---|---|
| **Description** | Specifies which LDAP attribute is used to check for group membership. This should be an attribute of the group class. If not specified, then CMC uses the member and unique member attributes. |
| **Legal Values** | String. Maximum length = 254 |
| **Default** | Null |

## cfgLDAPGroupAttributeIsDN (Read/Write)

| | |
|---|---|
| **Description** | If enabled, the CMC performs DN matching; otherwise, the CMC uses the username provided at login for matching. |
| **Legal Values** | • 1 (TRUE)—Use the *userDN* from the LDAP Server<br>• 0 (FALSE)—Use the *userDN* provided by the login user |
| **Default** | 1 |

## cfgLDAPBinddn (Read/Write)

| | |
|---|---|
| **Description** | The distinguished name of a user used to bind to the server when searching for the login user's DN. If not provided, an anonymous bind is used. This is optional but is required if anonymous bind is not supported.<br>**NOTE:** If **cfgLDAPBindDN** is [null] and **cfgLDAPBindPassword** is [null], then the CMC attempts an anonymous bind. |
| **Legal Values** | String. Maximum length = 254 |

| | |
|---|---|
| **Default** | Null |

## cfgLDAPBindpassword (Write Only)

| | |
|---|---|
| **Description** | A bind password to use in conjunction with the bindDN. The bind password is sensitive data, and should be protected. This is optional but is required if anonymous bind is not supported. |
| **Legal Values** | String. Maximum length = 254 |
| **Default** | Null |

## cfgLDAPSearchFilter (Read/Write)

| | |
|---|---|
| **Description** | A valid LDAP search filter. This is used if the user attribute cannot uniquely identify the login user within the chosen baseDN. The search filter only applies to userDN search and not the group membership search. |
| **Legal Values** | String of maximum length = 1024 characters |
| **Default** | (objectclass=*)<br>Searches for all objects in tree. |

## cfgLDAPCertValidationEnable (Read/Write)

| | |
|---|---|
| **Description** | Controls certificate validation during SSL handshake. |
| **Legal Values** | • 1 (TRUE)—CMC uses the CA certificate to validate the LDAP server certificate during SSL handshake.<br>• 0 (FALSE)—CMC does not performthe certificate validation task of SSL handshake. |
| **Default** | 1 |

## cfgLDAPNetworkTimeout

| | |
|---|---|
| **Description** | Configures the network timeout in seconds. |
| **Legal Values** | Positive integer |
| **Default** | 30 seconds |

## cfgLDAPSearchTimeout

| | |
|---|---|
| **Description** | Configures the search timeout in seconds. |
| **Legal Values** | Positive integer |
| **Default** | 120 seconds |

### cfgLDAPSRVLookupDomainName

| | |
|---|---|
| **Description** | Configures the domain name to be used in the SRV lookup. |
| **Legal Values** | String of maximum length of 254 alphanumeric characters and hyphens. The string must begin with a letter. |
| **Default** | [null] |

### cfgLDAPSRVLookupEnable

| | |
|---|---|
| **Description** | Configures the CMC to query a DNS server for SRV records. |
| **Legal Values** | • 1 (true)<br>• 0 (false) |
| **Default** | 0 |

### cfgLDAPSRVLookupServiceName (Read/Write)

| | |
|---|---|
| **Description** | Configures the service name to be used in the SRV lookup. |
| **Legal Values** | String of maximum length of 254 characters. |
| **Default** | ldap |

## cfgLDAPRoleGroup

Use this object with the `getconfig` or `config` subcommands.

To use this object property, you must have the **Chassis Configuration Administrator** privilege.

**NOTE:** You can configure any setting that is not preceded by the hash sign (#) in the output. To modify a configurable object, use the **-o** option.

This group configures Generic LDAP Role group descriptions and defines the CMC privileges that LDAP–authenticated users are granted.

**cfgLDAPRoleGroup** is indexed, containing instances numbered from 1 to 5. Each object instance consists of a pair of properties:

- **cfgLDAPRoleGroupDN**: an LDAP distinguished name (DN)
- **cfgLDAPRoleGroupPrivilege**: a CMC privilege map

Each LDAP–authenticated user assumes the total set of CMC privileges assigned to the matching LDAP distinguished names that the user belongs to.

That is, if the user belongs to multiple role group DNs, the user receives all associated privileges for those DNs.

The following sections provide information about the objects in the **cfgLdapRoleGroup** group.

### cfgLDAPRoleGroupDN (Read/Write)

| | |
|---|---|
| **Description** | This is the Domain Name of the group in this index. |

| | |
|---|---|
| | For CMC, configure the LDAP distinguished name (DN) for the role group instance. |
| **Legal Values** | String. Maximum length = 1024 |
| **Default** | None |

**Example**

```
racadm getconfig -g cfgLDAPRoleGroup -o cfgLDAPRoleGroupDN
-i 1 cn=everyone,ou=groups,dc=openldap,dc=com
```

### cfgLDAPRoleGroupPrivilege (Read/Write)

| | |
|---|---|
| **Description** | A bit–mask defining the privileges associated with this particular group. |
| **Legal Values** | 0x00000000 to 0x000001ff |
| **Default** | 0x000 |

**Example**

```
racadm getconfig -g cfgLDAPRoleGroup -o cfgLDAPRoleGroupPrivilege
-i 1 0x0
```

## cfgLocation

This group defines objects that support physical location properties. Use this object with the `getconfig` or `config` subcommands.

To use this object property, you must have the **Chassis Configuration Administrator** privilege.

### cfgLocationDatacenter (Read/Write)

| | |
|---|---|
| **Description** | Indicates DataCenter name. |
| **Legal Values** | String of up to 128 ASCII characters |
| **Default** | 0 |

### cfgLocationAisle (Read/Write)

| | |
|---|---|
| **Description** | Indicates aisle where server is located. |
| **Legal Values** | String of up to 128 ASCII characters |
| **Default** | 0 |

### cfgLocationRack (Read/Write)

| | |
|---|---|
| **Description** | Indicates rack where server is located. |
| **Legal Values** | String of up to 128 ASCII characters |
| **Default** | 0 |

### cfgLocationRackslot (Read/Write)

| | |
|---|---|
| **Description** | Indicates the slot where a server is located. |
| **Legal Values** | Values from 1 - 255 (1 Byte) |
| **Default** | 0 |

### cfgLocationDevicesize (Read Only)

| | |
|---|---|
| **Description** | Indicates server chassis size. |
| **Legal Values** | Values from 1 - 255 |
| **Default** | 0 |

## cfgStandardSchema

This group contains parameters to configure the Active Directory standard schema settings.

Use this object with the`getconfig` or `config` subcommands.

To use this object property, you must have the **Chassis Configuration Administrator** privilege.

**NOTE:** You can configure any setting that is not preceded by the hash sign (#) in the output. To modify a configurable object, use the **-o** option.

The following sections provide information about the objects in the **cfgStandardSchema** group.

### cfgSSADRoleGroupIndex (Read Only)

| | |
|---|---|
| **Description** | Index of the Role Group as recorded in the Active Directory. |
| **Legal Values** | An integer between 1 and 5 |
| **Default** | <*instance*> |

### cfgSSADRoleGroupName (Read/Write)

| | |
|---|---|
| **Description** | Name of the Role Group as recorded in the Active Directory forest. |
| **Legal Values** | Any printable text string of up to 254 characters with no white space. |
| **Default** | <*blank*> |

### cfgSSADRoleGroupDomain (Read/Write)

| | |
|---|---|
| **Description** | Active Directory Domain in which the Role Group resides. |
| **Legal Values** | Any printable text string of up to 254 characters, with no white space. |
| **Default** | <*blank*> |

### cfgSSADRoleGroupPrivilege (Read/Write)

| | |
|---|---|
| **Description** | Use the bit mask numbers listed in the table below to set role-based authority privileges for a Role Group. |
| **Legal Values** | 0x00000000 0x00000fff |
| **Default** | *<blank>* |

**Example**

```
racadm getconfig -g cfgStandardSchema -i 1
```

**NOTE:** -i <number> is for the index.

```
# cfgSSADRoleGroupIndex=1
cfgSSADRoleGroupName=
cfgSSADRoleGroupDomain=
cfgSSADRoleGroupPrivilege=
$ config -g cfgStandardSchema -i 1 -o cfgSSADRoleGroupName Charlie
Object value modified successfully
```

The following table displays the bit masks for Role Group privileges:

| Role Group Privilege | Bit Mask |
|---|---|
| Login to iDRAC | 0x00000001 |
| Configure iDRAC | 0x00000002 |
| Configure Users | 0x00000004 |
| Clear Logs | 0x00000008 |
| Execute Server Control Commands | 0x00000010 |
| Access Virtual Console | 0x00000020 |
| Access Virtual Media | 0x00000040 |
| Test Alerts | 0x00000080 |
| Execute Debug Commands | 0x00000100 |

## cfgChassisPower

This group is applicable only to CMC and contains parameters to display or configure power for the chassis.

Use this object with the config or getconfig subcommands.

To use this object property, you must have the **Chassis Configuration Administrator** privilege.

**NOTE:** You can configure any setting that is not preceded by the hash sign (#) in the output. To modify a configurable object, use the **-o** option.

The following sections provide information about the objects in the **cfgChassisPower** group.

## cfgChassisInPower (Read Only)

| | |
|---|---|
| **Description** | Indicates the cumulative input power consumption data (in Watt and BTU/hr) captured from all healthy and functional PSUs in the chassis. |
| **Legal Values** | None |
| **Default** | None |

## cfgChassisPeakPower (Read Only)

| | |
|---|---|
| **Description** | Indicates the maximum system input power consumption (in Watt). |
| **Legal Values** | |
| **Default** | |

## cfgChassisPeakPowerTimestamp (Read Only)

| | |
|---|---|
| **Description** | The timestamp recorded when the peak input power consumption value occurred. |
| **Legal Values** | |
| **Default** | |

## cfgChassisMinPower (Read Only)

| | |
|---|---|
| **Description** | The minimum system input power consumption value (in Watt) over the time since the value was last cleared. |
| **Legal Values** | None |
| **Default** | None |

## cfgChassisMinPowerTimestamp (Read Only)

| | |
|---|---|
| **Description** | The timestamp recorded when the minimum system power occurred. |
| **Legal Values** | None |
| **Default** | None |

## cfgChassisPowerStatus (Read Only)

| | |
|---|---|
| **Description** | Indicates the power status of the chassis. |
| **Legal Values** | • 1 (other)<br>• 2 (unknown)<br>• 3 (OK)<br>• 4 (non-critical)<br>• 5 (critical)<br>• 6 (non-recoverable) |

| | |
|---|---|
| **Default** | None |

## cfgChassisRedundantState (Read Only)

| | |
|---|---|
| **Description** | Enables or disables power redundancy for the chassis. |
| **Legal Values** | • 0 (none)<br>• 1 (full) |
| **Default** | None |

## cfgChassisDefaultPowerCapUpperBound (Read Only)

| | |
|---|---|
| **Description** | Indicates the maximum default value to which you can set the power cap of a chassis. |
| **Legal Values** | 5000 Watt |
| **Default** | 5000 Watt |

## cfgChassisDefaultPowerCapUpperBoundBTU(Read Only)

| | |
|---|---|
| **Description** | Indicates the maximum default value to which you can set the power cap of a chassis. |
| **Legal Values** | 17060 BTU/h |
| **Default** | 17060 BTU/h |

## cfgChassisDefaultPowerCapLowerBound (Read Only)

| | |
|---|---|
| **Description** | Indicates the minimum default value to which you can set the power cap of a chassis. |
| **Legal Values** | Zero Watt |
| **Default** | Zero Watt |

## cfgChassisDefaultPowerCapLowerBoundBTU(Read Only)

| | |
|---|---|
| **Description** | Indicates the minimum default value to which you can set the power cap of a chassis. |
| **Legal Values** | Zero Watt |
| **Default** | Zero Watt |

## cfgChassisPowerCap (Read/Write)

| | |
|---|---|
| **Description** | Indicates the maximum power consumption limit (in Watt) for the entire chassis. The command generates an error if server throttling is necessary to achieve the power goal based on the value for this setting. |
| **Legal Values** | 2715 – 16685 Watt |

| | |
|---|---|
| **Default** | 16685 Watt |

## cfgChassisPowerCapF (Read/Write)

| | |
|---|---|
| **Description** | Indicates the maximum power consumption limit (in Watt) for the entire chassis. Use **cfgChassisPowerCapF** when power consumption is to be changed regardless of whether server throttling is required. This command generates an error if the value for this setting is lower than the minimum power required for the chassis configuration. |
| **Legal Values** | 2715 – 16685 Watt |
| **Default** | 16685 Watt |

## cfgChassisPowerCapFBTU (Read/Write)

| | |
|---|---|
| **Description** | Indicates the maximum power consumption limit (in BTU/hr) for the entire chassis. Use **cfgChassisCapFBTU** when power consumption is to be changed regardless of whether server throttling is required. The command generates an error if the value for this setting is lower than the minimum power required for the chassis configuration. |
| **Legal Values** | 9264 - 56931 BTU/hr |
| **Default** | 56931 BTU/hr |

## cfgChassisPowerCapPercent (Read/Write)

| | |
|---|---|
| **Description** | Indicates the power consumption limit as a percentage. The percentage is computed mathematically as the minimum power + (percent * (maximum power - minimum power)). The command generates an error if server throttling is necessary to achieve the power goal based on the value for this setting. |
| **Legal Values** | 16 -100 |
| **Default** | 100 |

## cfgChassisPowerCapFPercent (Read/Write)

| | |
|---|---|
| **Description** | Indicates the power consumption limit as a percentage. The percentage is computed mathematically as the minimum power + (percent * (maximum power - minimum power)). Use **cfgChassisPowerCapFPercent** when power consumption is to be changed regardless of whether server throttling is required. |
| **Legal Values** | 16 - 100 |
| **Default** | 100 |

## cfgChassisRedundancyPolicy (Read/Write)

| | |
|---|---|
| **Description** | Sets the redundancy policy of the chassis. |
| **Legal Values** | • 0 (no redundancy)<br>• 1 (AC redundancy)<br>• 2 (power supply redundancy) |
| **Default** | 0 (no redundancy) |

## cfgChassisDynamicPSUEngagementEnable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables dynamic engagement. |
| **Legal Values** | • 0 (disabled)<br>• 1 (enabled) |
| **Default** | 0 (disabled) |

## cfgChassisInMaxPowerCapacity (Read Only)

| | |
|---|---|
| **Description** | Indicates the total chassis power budget (in watts) available for chassis operation. |
| **Legal Values** | None |
| **Default** | None |

## cfgChassisInRedundancyReserve (Read Only)

| | |
|---|---|
| **Description** | Indicates the amount of redundant power (in Watt) in reserve that can be utilized in the event of an AC grid or PSU failure. This value is 0 if the Redundancy Policy is set to 0 (no redundancy). |
| **Legal Values** | 0 (disabled)<br>1 (enabled) |
| **Default** | None |

## cfgChassisInPowerServerAllocation (Read Only)

| | |
|---|---|
| **Description** | Indicates (in Watt) the cumulative power allocated to servers. There is no default as this parameter is very specific to the particular customer configuration. |
| **Legal Values** | None |
| **Default** | None |

## cfgChassisInfrastructureInPowerAllocation (Read Only)

| | |
|---|---|
| **Description** | Indicates the estimated cumulative DC output power consumption (in watts), determined from a field replaceable unit (FRU) on the hardware modules in the chassis. |
| **Legal Values** | None |

| | |
|---|---|
| **Default** | None |

## cfgChassisTotalInPowerAvailable (Read Only)

| | |
|---|---|
| **Description** | Indicates the amount of power (in Watt) available for use by the chassis. |
| **Legal Values** | None |
| **Default** | None |

## cfgChassisStandbyInPowerCapacity (Read Only)

| | |
|---|---|
| **Description** | Indicates the amount of power (in Watt) available for turning on any hardware modules that are either added to the chassis or if they are already present in the chassis. |
| **Legal Values** | None |
| **Default** | None |

## cfgChassisPowerClear (Write Only)

| | |
|---|---|
| **Description** | Resets **cfgChassisMinPower** and **cfgChassisMaxPowerCapacity**, when set to **1**. |
| **Legal Values** | None |
| **Default** | None |

## cfgChassisPowerClearTimestamp (Read Only)

| | |
|---|---|
| **Description** | Time stamp when **cfgChassisMinPower** and **cfgChassisMaxPowerCapacity** were reset. |
| **Legal Values** | None |
| **Default** | None |

## cfgChassisPowerButtonEnable (Read/Write)

| | |
|---|---|
| **Description** | Indicates if the chassis power button is enabled or disabled. |
| **Legal Values** | • 0 (disabled)<br>• 1 (enabled) |
| **Default** | None |

## cfgSystemEnergyConsumptionClear (Write Only)

| | |
|---|---|
| **Description** | Resets energy statistics when set to 1. |
| **Legal Values** | None |
| **Default** | None |

**Examples**

- ```
  racadm getconfig -g cfgChassisPower
  # cfgChassisInPower=0 W | 0 BTU/hr
  # cfgChassisPeakPower=0 W
  # cfgChassisPeakPowerTimestamp=06:32:55 01/26/2009
  # cfgChassisMinPower=0 W
  # cfgChassisMinPowerTimestamp=06:32:55 01/26/2009
  # cfgChassisPowerStatus=5
  # cfgChassisRedundantState=0
  cfgChassisPowerCap=16685 W
  cfgChassisPowerCapF=16685 W
  cfgChassisPowerCapBTU=56931 BTU/hr
  cfgChassisPowerCapFBTU=56931 BTU/hr
  cfgChassisPowerCapPercent =100%
  cfgChassisPowerCapFPercent =100%
  cfgChassisRedundancyPolicy=0
  cfgChassisDynamicPSUEngagementEnable=0
  # cfgChassisInMaxPowerCapacity=0 W
  # cfgChassisInRedundancyReserve=0 W
  # cfgChassisInPowerServerAllocation=0 W
  # cfgChassisInfrastructureInPowerAllocation=51 W
  # cfgChassisTotalInPowerAvailable=0 W
  # cfgChassisStandbyInPowerCapacity=0 W
  # cfgChassisPowerClear=******** (Write-Only)
  # cfgChassisPowerClearTimestamp=18:00:00 12/31/1969
  cfgChassisServerBasedPowerMgmtMode=0
  cfgChassisPowerButtonEnable=1
  cfgChassisAllow110VACOperation=0
  cfgChassisMaxPowerConservationMode=0
  cfgChassisPerformanceOverRedundancy=1
  # cfgSystemEnergyConsumptionClear = ****(Write-Only)
  cfgChassisServerBasedPowerMgmtMode=0
  ```
- ```
  racadm config -g cfgChassisPower -o cfgChassisPowerClear 1
  ```

  Clears **cfgChassisMinPower** and **cfgChassisPeakPower**.

## cfgChassisServerBasedPowerMgmtMode

| | |
|---|---|
| **Description** | Indicates the server-based power management mode of a chassis. |
| **Legal Values** | • 0 (disabled)<br>• 1 (enabled) |
| **Default** | 0 (disabled) |

## cfgChassisPowerCapBTU (Read/Write)

| | |
|---|---|
| **Description** | Indicates the maximum power consumption limit (in BTU/hr) for the entire chassis. The command generates an error if server throttling is necessary to achieve the power goal based on the value for this setting. |
| **Legal Values** | 9264 - 56931 BTU/hr |
| **Default** | 43221 BTU/hr |

# cfgKVMInfo

This group is used to view the mapping information for the KVM.

Use this object with the config or getconfig subcommands.

To use this object property, you must have **Chassis Configuration Administrator** privilege.

## cfgKvmMapping Read or Write

| | |
|---|---|
| **Description** | Maps the slots to the KVM. |
| **Legal Values** | 1, 2, 3, and 4 are the slot numbers that are specified. |
| **Default** | 1 |

## cfgKvmSlot<num>Enable Read or Write

| | |
|---|---|
| **Description** | Enable the slots (1 to 4) to access using KVM:<br>• `cfgKvmSlot1Enable`<br>• `cfgKvmSlot2Enable`<br>• `cfgKvmSlot3Enable`<br>• `cfgKvmSlot4Enable` |
| **Legal Values** | 0 disables the mapping and 1 enables the mapping. |
| **Default** | None |

# cfgDvdInfo

This group is used to view the mapping information for the DVD drive in the chassis.

Use this object with the config or getconfig subcommands.

To use this object property, you must have the **Chassis Configuration Administrator** privilege.

## cfgDvdMapping Read or Write

| | |
|---|---|
| **Description** | Maps the slots to the DVD drive in the chassis: |
| **Legal Values** | 1, 2, 3, and 4 are the slot numbers that are specified. |
| **Default** | 1 |

## cfgDvdSlot<num>Enable Read or Write

| | |
|---|---|
| **Description** | Enable the slots (1 to 4) to access the DVD:<br>• `cfgDvdSlot1Enable`<br>• `cfgDvdSlot2Enable`<br>• `cfgDvdSlot3Enable` |

- `cfgDvdSlot4Enable`

| | |
|---|---|
| **Legal Values** | 0 disables the mapping and 1 enables the mapping. |
| **Default** | None |

# cfgLcdInfo

This group is used to view the LCD locale, LCD orientation, and to check if the buttons to navigate through the LCD menu are enabled.

Use this object with the config or getconfig subcommands.

To use this object property, you must have the **Chassis Configuration Administrator** privilege.

The legal values when you run the `getconfig -g cfgLcdInfo` to view information about the following are:

- cfgLcdLocale=es
- cfgLcdOrientation=0
- cfgLcdButtonsEnable=1

# cfgAlerting

This group is enables or disables SNMP event trap alerting and sets the event filter.

Use this object with the config or getconfig subcommands.

To use this object property, you must have the **Chassis Configuration Administrator** privilege.

## cfgAlertingEnable

| | |
|---|---|
| **Description** | Enables or disables event traps on the CMC. |
| **Legal Values** | • 1 (true)<br>• 0 (false) |
| **Default** | None |

## cfgAlertingSourceEmailName

| | |
|---|---|
| **Description** | Specifies the e-mail address used to send e-mail notifications when an event occurs. |
| **Legal Values** | Valid e-mail address |
| **Default** | None |

**Examples**

```
racadm getconfig -g cfgAlerting -o cfgAlertingSourceEmailName
```

```
racadm config -g cfgAlerting -o cfgAlertingSourceEmailName user@home.com
```

```
Object value modified successfully.
```

# cfgIPv6LanNetworking

This group is used to configure the IPv6 over LAN networking capabilities.

Use this object with the **config** or **getconfig** subcommands.

To use this object property for CMC, you must have the **Chassis Configuration Administrator** privilege.

The following sections provide information about the objects in the **cfgIPv6LanNetworking** group.

## cfgIPv6Enable (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables the IPv6 stack. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 0 |

## cfgIPv6AutoConfig (Read/Write)

| | |
|---|---|
| **Description** | Enables or disables the **IPv6 Auto Configuration** option.<br>**NOTE:** If this value is set to 0, the CMC disables auto configuration and statically assigns IPv6 addresses. If this value is set to 1, the CMC obtains address and route information using stateless auto configuration and DHCPv6.<br>**NOTE:** The CMC uses its MAC address for its DUID (DUID-LL) when communicating with a DHCPv6 server. |
| **Legal Values** | • 1 (TRUE)<br>• 0 (FALSE) |
| **Default** | 1 |

## cfgIPv6Address

| | |
|---|---|
| **Description** | Assigns a static IPv6 address to the CMC. This property is used only if **cfgIPv6AutoConfig** is set to 0 (false). |
| **Legal Values** | A string representing a valid IPv6 address. For example, 2001:DB8:1234:5678:9ABC:DE11:C00C:BEEF |
| **Default** | :: |

## cfgIPv6PrefixLength (Read/Write)

| | |
|---|---|
| **Description** | Specifies the prefix length for IPv6 address.<br>**NOTE:** This property is used only if **cfgIPv6AutoConfig** is set to 0 (false) |
| **Legal Values** | 0–128 |
| **Default** | 64 |

## cfgIPv6Gateway (Read/Write)

| | |
|---|---|
| **Description** | CMC gateway IPv6 address.<br>**NOTE:** This property is used only if **cfgIPv6AutoConfig** is set to 0 (false.) |
| **Legal Values** | Specifies string representing a valid IPv6 entry. |
| **Default** | :: |

## cfgIPv6DNSServersFromDHCP6 (Read/Write)

| | |
|---|---|
| **Description** | Specifies whether **cfgIPv6DNSServer1** and **cfgIPv6DNSServer2** are static or DHCP IPv6 addresses.<br>**NOTE:** This property is used only if **cfgIPv6AutoConfig** is set to 1 (true). |
| **Legal Values** | 1 (TRUE) 0 (FALSE) |
| **Default** | 1 |

## cfgIPv6DNSServer1 (Read/Write)

| | |
|---|---|
| **Description** | Specifies the IPv6 DNS server address.<br>**NOTE:** This property is used only if **cfgIPv6DNSServersFromDHCP6** is set to 0 (false). |
| **Legal Values** | A string representing a valid IPv6 entry. For example, 2001:DB8:1234:5678:9ABC:DE11:C00C:BEEF |
| **Default** | :: |

### cfgIPv6DNSServer2 (Read/Write)

| | |
|---|---|
| **Description** | Specifies the IPv6 DNS server address.<br>**NOTE:** This property is only valid if **cfgIPv6DNSServersFromDHCP6** is set to 0 (false). |
| **Legal Values** | A string representing a valid IPv6 entry. For example, 2001:DB8:1234:5678:9ABC:DE11:C00C:BEEF |
| **Default** | :: |

**Example**

```
$ racadm getconfig -g cfgIPv6LanNetworking
cfgIPv6Enable=1
cfgIPv6AutoConfig=1
cfgIPv6Address=::
cfgIPv6PrefixLength=64
cfgIPv6Gateway=::
cfgIPv6DNSServersFromDHCP6=1
cfgIPv6DNSServer1=::
cfgIPv6DNSServer2=::
```

If both IPv4 and IPv6 are enabled on the CMC, IPv6 DNS servers take priority. The order of preference for DNS servers is:

- cfgIPv6DNSServer1
- cfgIPv6DNSServer2
- cfgDNSServer1
- cfgDNSServer2

## cfgCurrentLanNetworking (Read Only)

This group displays the current CMC NIC properties.

Use this object with the **getconfig** subcommand.

To use this object property, you must have the **CMC Login User** privilege.

**Synopsis**

```
racadm getconfig -g cfgCurrentLanNetworking
```

### cfgNicCurrentIPv4Enabled

| | |
|---|---|
| **Description** | Indicates whether IPv4 is enabled on the CMC. If the current property value is set to 0 (false), the remote network interfaces to the CMC are not accessible over IPv4. |
| **Legal Values** | |

**Default**

**Example**

```
racadm getconfig -g cfgCurrentLanNetworking
# cfgNicCurrentIPv4Enabled=1
# cfgNicCurrentIpAddress=143.166.152.116
# cfgNicCurrentNetmask=255.255.255.0
# cfgNicCurrentGateway=143.166.152.1
# cfgNicCurrentDhcpWasUsed=0
# cfgNicCurrentVlanEnable=0
# cfgNicCurrentVlanID=1
# cfgNicCurrentVlanPriority=0
# cfgDNSCurrentServer1=192.168.0.5
# cfgDNSCurrentServer2=192.168.0.6
# cfgDNSCurrentDomainName=MYDOMAIN
```

## cfgNicCurrentIpAddress

| | |
|---|---|
| **Description** | Displays the static IP address to the CMC. |
| **Legal Values** | |
| **Default** | |

## cfgNicCurrentNetmask

| | |
|---|---|
| **Description** | Displays the static subnet mask for the CMC IP address. |
| **Legal Values** | |
| **Default** | |

## cfgNicCurrentGateway

Displays the static gateway for the CMC IP address.

| | |
|---|---|
| **Description** | Displays the static gateway for the CMC IP address. |
| **Legal Values** | |
| **Default** | |

## cfgNicCurrentDhcpWasUsed

| | |
|---|---|
| **Description** | Indicates whether DHCP is used to configure the NIC. |
| **Legal Values** | 0 – address is static.<br>1– address was obtained from the DHCP server. |
| **Default** | None |

## cfgNicCurrentVlanEnable (Read Only)

| | |
|---|---|
| **Description** | Indicates whether the VLAN is enabled. |
| **Legal Values** | 0- VLAN is disabled<br>1- VLAN is enabled |

| | |
|---|---|
| **Default** | None |

### cfgNicCurrentVlanID (Read Only)

| | |
|---|---|
| **Description** | Indicates the Current Virtual Lan ID |
| **Legal Values** | Integer |
| **Default** | None |

### cfgNicCurrentVlanPriority (Read Only)

| | |
|---|---|
| **Description** | Indicates the Current Virtual Lan Priority. |
| **Legal Values** | Integer |
| **Default** | None |

### cfgDNSCurrentServer1

| | |
|---|---|
| **Description** | Displays the IP address for DNS server 1. |
| **Legal Values** | A Valid IPv4 DNS IP |
| **Default** | None |

### cfgDNSCurrentServer2

| | |
|---|---|
| **Description** | Displays the IP address for DNS server 2. |
| **Legal Values** | |
| **Default** | |

### cfgDNSCurrentDomainName

| | |
|---|---|
| **Description** | Displays the DNS domain name. |
| **Legal Values** | |
| **Default** | |

## cfgCurrentIPv6LanNetworking (Read Only)

This group displays the current CMC IPv6 properties.

Use this object with the **getconfig** subcommand.

To use this object property, you must have the **CMC Login User** privilege.

### cfgCurrentIPv6Enabled

| | |
|---|---|
| **Description** | Indicates whether IPv6 is enabled on the CMC. If the current property value is set to 0 (false), the remote |

| | |
|---|---|
| | network interfaces to the CMC are not accessible over IPv6. |
| **Legal Values** | |
| **Default** | |

## cfgCurrentIPv6AutoConfigWasUsed

| | |
|---|---|
| **Description** | Indicates whether auto configuration is used to obtain IPv6 settings, including stateless IPv6 address(es) and gateway. |
| **Legal Values** | 0 (static addressing is used)<br>1 (address is obtained from the DHCPv6 server and/or stateless auto configuration) |
| **Default** | None |

## cfgCurrentLinkLocalAddress

| | |
|---|---|
| **Description** | Displays the current IPv6 link-local address of the CMC. |
| **Legal Values** | |
| **Default** | |

## cfgCurrentIPv6Address

| | |
|---|---|
| **Description** | Displays the current IPv6 addresses. This property displays up to 15 global IPv6 addresses, including stateful and stateless addresses. |
| **Legal Values** | |
| **Default** | |

## cfgCurrentIPv6Gateway

| | |
|---|---|
| **Description** | Displays the current IPv6 gateway. |
| **Legal Values** | |
| **Default** | |

## cfgCurrentIPv6DNSServersFromDHCP6

| | |
|---|---|
| **Description** | Indicates whether the DNS server addresses are assigned from the DHCPv6 server. |
| **Legal Values** | |
| **Default** | |

### cfgCurrentIPv6DNSServer1

| | |
|---|---|
| **Description** | Displays the IPv6 address for DNS server 1. |
| **Legal Values** | |
| **Default** | |

### cfgCurrentIPv6DNSServer2

| | |
|---|---|
| **Description** | Displays the IPv6 address for DNS server 2. |
| **Legal Values** | None |
| **Default** | None |

**Example**

```
racadm getconfig -g cfgCurrentIPv6LanNetworking
# cfgCurrentIPv6Enabled=1
# cfgCurrentIPv6AutoConfigWasUsed=1
# cfgCurrentLinkLocalAddress=fe80::21e:4fff:fe1f:5371/64
# cfgCurrentIPv6Address1=2009:123::e48f:9dd8:6f51:a669/64
# cfgCurrentIPv6Address2=fd88:1::21e:4fff:fe1f:5371/64
# cfgCurrentIPv6Address3=fd88:2::21e:4fff:fe1f:5371/64
# cfgCurrentIPv6Gateway=fe80::21c:23ff:fe77:6215
# cfgCurrentIPv6DNSServersFromDHCP6=1
# cfgCurrentIPv6DNSServer1=2009:123::1
# cfgCurrentIPv6DNSServer2=::
```

## cfgNetTuning

This group enables users to configure the advanced network interface parameters for the RAC NIC or CMC. When configured, the updated settings may take up to a minute to become active.

The following sections provide information about the objects in the **cfgNetTuning** group.

**CAUTION: Use extra precaution when modifying properties in this group. Inappropriate modification of the properties in this group can result in your RAC NIC become inoperable.**

### cfgNetTuningNicSpeed

| | |
|---|---|
| **Description** | Specifies the speed for the CMC NIC. This property is used only if **cfgNetTuningNicAutoNeg** is set to 0. |
| **Legal Values** | 10, 100, or 1000 |
| **Default** | 100 |

### cfgNetTuningNicFullDuplex (Read/Write)

| | |
|---|---|
| **Description** | Specifies the duplex setting for the RAC or CMC NIC. This property is used only if the **cfgNetTuningNicAutoNeg** is set to 0 (disabled). |
| **Legal Values** | • 0 (Half Duplex)<br>• 1 (Full Duplex) |

| | |
|---|---|
| **Default** | 1 |

### cfgNetTuningNicMtu (Read/Write)

| | |
|---|---|
| **Description** | The size in bytes of the maximum transmission unit used by CMC NIC. |
| **Legal Values** | 576 – 1500 |
| **Default** | 1500 |

**NOTE:** IPv6 requires a minimum MTU of 1280. If IPv6 is enabled, and **cfgNetTuningMtu** is set to a lower value, the CMC uses an MTU of 1280.

### cfgNetTuningNicAutoneg (Read/Write)

| | |
|---|---|
| **Description** | Enables autonegotiation of physical link speed and duplex. If enabled, autonegotiation takes priority over other values set in this group. |
| **Legal Values** | • 0 = Auto Negotiation is Disabled<br>• 1 = Auto Negotiation is Enabled |
| **Default** | 1 |

**Example**

```
racadm getconfig -g cfgNetTuning

cfgNetTuningNicSpeed=100
cfgNetTuningNicFullDuplex=1
cfgNetTuningNicMtu=1500
cfgNetTuningNicAutoneg=1
```

## cfgRacSecurity

This group is used to configure settings related to CMC SSL certificate signing request (CSR) feature. The properties in this group must be configured before generating a CSR from CMC.

Use this object with the config or getconfig subcommands.

To use this object property, you must have **Chassis Configuration Administrator** privilege.

For more information on generating certificate signing requests, see the subcommand "sslcsrgen."

The following sections provide information about the objects in the **cfgRacSecurity** group.

### cfgRacSecCsrCommonName (Read/Write)

| | |
|---|---|
| **Description** | Specifies the CSR Common Name (CN) that must be an IP or CMC name as given in the certificate. |
| **Legal Values** | A string of up to 254 characters. |
| **Default** | <*blank*> |

## cfgRacSecCsrOrganizationName (Read/Write)

| | |
|---|---|
| **Description** | Specifies the CSR Organization Name (O). |
| **Legal Values** | A string of up to 254 characters. |
| **Default** | <*blank*> |

## cfgRacSecCsrOrganizationUnit (Read/Write)

| | |
|---|---|
| **Description** | Specifies the CSR Organization Unit (OU). |
| **Legal Values** | A string of up to 254 characters. |
| **Default** | <*blank*> |

## cfgRacSecCsrLocalityName (Read/Write)

| | |
|---|---|
| **Description** | Specifies the CSR Locality (L). |
| **Legal Values** | A string of up to 254 characters. |
| **Default** | <*blank*> |

## cfgRacSecCsrStateName (Read/Write)

| | |
|---|---|
| **Description** | Specifies the CSR State Name (S). |
| **Legal Values** | A string of up to 254 characters. |
| **Default** | <*blank*> |

## cfgRacSecCsrCountryCode (Read/Write)

| | |
|---|---|
| **Description** | Specifies the CSR Country Code (CC). |
| **Legal Values** | A string of 2 alphabet country code. |
| **Default** | US |

## cfgRacSecCsrEmailAddr (Read/Write)

| | |
|---|---|
| **Description** | Specifies the CSR email address. |
| **Legal Values** | A string of up to 254 characters. |
| **Default** | <*blank*> |

**Example**

```
racadm config -g cfgRacSecurity

cfgRacSecCsrKeySize=1024
cfgRacSecCommonName=
cfgRacSecOrganizationName=
cfgRacSecOrganizationUnit=
cfgRacSecLocalityName=
cfgRacSecStateName=
```

```
cfgRacSecCountryCode=
cfgRacSecEmailAddr=
```

## cfgRacSecCsrKeySize (Read/Write)

| | |
|---|---|
| **Description** | Specifies the SSL asymmetric key size for the CSRs. |
| **Legal Values** | 512, 1024, 2048 |
| **Default** | 1024 |