Dell Chassis Management Controller Version 1.3 for PowerEdge FX2/FX2s
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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<td><code>cfgChassisPowerCapBTU</code></td>
<td>(Read/Write)</td>
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<td><code>cfgKVMInfo</code></td>
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</tr>
<tr>
<td><code>cfgKvmEnable</code></td>
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<td><code>cfgKvmMapping</code></td>
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<td><code>cfgAlerting</code></td>
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<td><code>cfgAlertingSourceEmailName</code></td>
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<tr>
<td><code>cfgIpv6LanNetworking</code></td>
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<tr>
<td><code>cfgIpv6Enable</code></td>
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<td><code>cfgCurrentIpv6DNSServersFromDHCP6</code></td>
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<td><code>cfgIpv6DNSServer1</code></td>
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<td><code>cfgCurrentLanNetworking</code></td>
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<td><code>cfgNicCurrentIpAddress</code></td>
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<td><code>cfgNicCurrentNetmask</code></td>
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<td><code>cfgNicCurrentDhcpWasUsed</code></td>
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<td><code>cfgNicCurrentVlanPriority</code></td>
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<td><code>cfgDNSCurrentServer1</code></td>
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<td><code>cfgDNSCurrentServer2</code></td>
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<tr>
<td><code>cfgDNSCurrentDomainName</code></td>
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<tr>
<td><code>cfgNicCurrentIPv4Enabled</code></td>
<td></td>
</tr>
<tr>
<td><code>cfgCurrentIPv6LanNetworking</code></td>
<td>(Read Only)</td>
</tr>
<tr>
<td><code>cfgCurrentIPv6Enabled</code></td>
<td>(Read/Write)</td>
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<tr>
<td><code>cfgCurrentIPv6AutoConfigWasUsed</code></td>
<td>(Read/Write)</td>
</tr>
<tr>
<td><code>cfgCurrentLinkLocalAddress</code></td>
<td></td>
</tr>
<tr>
<td><code>cfgCurrentIPv6Address</code></td>
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</tr>
<tr>
<td><code>cfgCurrentIPv6Gateway</code></td>
<td></td>
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<tr>
<td><code>cfgCurrentIPv6DNSServersFromDHCP6</code></td>
<td></td>
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<tr>
<td><code>cfgCurrentIPv6DNSServer1</code></td>
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<td><code>cfgCurrentIPv6DNSServer2</code></td>
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<td><code>cfgNetTuningNicAutoneg</code></td>
<td>(Read/Write)</td>
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<td><code>cfgNetTuningNicFullDuplex</code></td>
<td>(Read/Write)</td>
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<td><code>cfgNetTuningNicMtu</code></td>
<td>(Read/Write)</td>
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<td><code>cfgNetTuningNicRedunadant</code></td>
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cfgRacSecCsrOrganizationName (Read/Write)

cfgRacSecCsrOrganizationUnit (Read/Write)

cfgRacSecCsrLocalityName (Read/Write)

cfgRacSecCsrStateName (Read/Write)

cfgRacSecCsrCountryCode (Read/Write)

cfgRacSecCsrEmailAddr (Read/Write)

cfgRacSecCsrKeySize (Read/Write)

cfgPCleReassignmentEnable (Read/Write)
Introduction

This document provides information about the RACADM subcommands, supported RACADM interfaces, and property database groups and object definitions of CMC for PowerEdge FX2/FX2s.

NOTE: The terms “storage sled” and “storage module” are used interchangeably in this document.

What’s new in this release

This release supports:

- The -s option in the getioinfo command.
- The -h option in the getslotname and setslotname commands.
- The following options in the get command:
  - -u
  - -p
  - -l
  - -t
  - --clone
  - --replace
  - --includeph
- The following options in the set command:
  - -f
  - -u
  - -p
  - -l
  - -t
- The cfgSerialConsoleQuitKey (Read or Write) object added to the cfgSerial group.
- The new column <Mode> added in the output for the getioinfo command.

Supported RACADM Interfaces

The RACADM command-line utility provides a scriptable interface that allows you to remotely configure your Chassis Management Controller (CMC). 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 myuser -p mypass getconfig -g idracinfo`

`racadm -r <racIpAddr> -u myuser -p mypass getsysinfo`

**RACADM Command Options**

The following table lists the options for the RACADM command.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-r &lt;racIpAddr&gt;</td>
<td>Specifies the controller’s remote IP address.</td>
</tr>
<tr>
<td>-u &lt;usrName&gt;</td>
<td>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 is not allowed.</td>
</tr>
<tr>
<td>-p &lt;password&gt;</td>
<td>Specifies the password used to authenticate the command transaction. If the -p option is used, the -i option is not allowed.</td>
</tr>
<tr>
<td>-S</td>
<td>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.</td>
</tr>
<tr>
<td>-I &lt;indexnumber&gt;</td>
<td>Specifies the index number for the indexed group, if applicable.</td>
</tr>
<tr>
<td>-g &lt;groupName&gt;</td>
<td>Specifies the group name, if applicable.</td>
</tr>
<tr>
<td>-o &lt;objectname&gt;</td>
<td>Specifies the object name, if applicable.</td>
</tr>
</tbody>
</table>

The following table provides the supported RACADM interfaces.

<table>
<thead>
<tr>
<th>Type</th>
<th>Local RACADM</th>
<th>SSH/Telnet RACADM</th>
<th>Remote RACADM</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMC</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
**NOTE:** Multiple instances of remote RACADM can be run on a management station.

### Displayable Characters
Displayable characters include the following set:

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

### 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](#).

<table>
<thead>
<tr>
<th>Subcommand</th>
<th>CMC</th>
<th>Telnet/SSH/Serial</th>
<th>Remote RACADM</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;?&quot; and &quot;?&lt;subcommand&gt;&quot;</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>chassisaction</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>chassislog</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>closessn</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>clrsel</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>config</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>connect</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>deploy</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>eventfilters</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>fanoffset</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>feature</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>featurecard</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>fwupdate</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>get</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>getactiveerrors</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>getassettag</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>getchassisname</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>getconfig</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>getdcinfo</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>getflexaddr</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>getinfo</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>getled</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>getmacaddress</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Subcommand</td>
<td>CMC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>getmodinfo</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>getniccfg</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>getpbinfo</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>getpciecfg</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>getpminfo</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>getraclog</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>gettractime</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>getsel</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>getsleduplinkstatus</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>getsensorinfo</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>getslotname</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>getssninfo</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>getsvctag</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>getsysinfo</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>getversion</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>help and help &lt;subcommand&gt;</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>ifconfig</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>jobqueue</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>krbkeytabupload</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>license</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>netstat</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>ping</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>ping6</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>racdump</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>racreset</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>racresetcfg</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>remoteimage</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>serveraction</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>set</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>setassettag</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>setflexaddr</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>setled</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>setniccfg</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>settractime</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>setslotname</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>setsysinfo</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Subcommand</td>
<td>CMC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sshpkauth</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>sslkeyupload</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>sslcertview</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>sslcsrgen</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>ssldesetcfg</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>testemail</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>testfeature</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>testtrap</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>traceroute</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>traceroute6</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

**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](http://dell.com/support/manuals).

- The CMC FX2/FX2s Online Help provides information about using the Web interface. To access the Online Help, click **Help** on the CMC web interface.
- The Dell Chassis Management Controller (CMC) for Dell PowerEdge FX2/FX2s 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.
- 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 FX2/FX2s 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](http://www.dell.com/regulatory_compliance). Warranty information may be included within this document or as a separate document.
- 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](http://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.
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.

? followed by < subcommand > displays the syntax for the specified command.

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

You can also use the help and help < subcommand > commands to obtain the same information.

Synopsis
• racadm ?
• 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.

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>help</td>
<td>list racadm subcommand description</td>
</tr>
<tr>
<td>help &lt;subcommand&gt;</td>
<td>display usage summary for a subcommand</td>
</tr>
<tr>
<td>?</td>
<td>list racadm subcommand description</td>
</tr>
<tr>
<td>? &lt;subcommand&gt;</td>
<td>display usage summary for a subcommand</td>
</tr>
<tr>
<td>arp</td>
<td>display the networking arp table</td>
</tr>
<tr>
<td>chassisaction</td>
<td>execute chassis or switch power-up/down/cycle or</td>
</tr>
<tr>
<td>clrraclog</td>
<td>clear the CMC log</td>
</tr>
<tr>
<td>clrsel</td>
<td>clear the System Event Log (SEL)</td>
</tr>
<tr>
<td>config</td>
<td>modify CMC configuration properties</td>
</tr>
<tr>
<td>...</td>
<td></td>
</tr>
<tr>
<td>setniccfg</td>
<td>modify network configuration properties</td>
</tr>
<tr>
<td>setractime</td>
<td>set the time on the CMC</td>
</tr>
<tr>
<td>setslotname</td>
<td>set the name of the slot in the chassis</td>
</tr>
<tr>
<td>setsysinfo</td>
<td>set the chassis name and chassis location</td>
</tr>
<tr>
<td>sslcertview</td>
<td>display a CA/server certificate in the CMC</td>
</tr>
<tr>
<td>sslcsrgen</td>
<td>generate a certificate CSR from the CMC</td>
</tr>
<tr>
<td>testemail</td>
<td>test CMC e-mail notifications</td>
</tr>
<tr>
<td>testfeature</td>
<td>test CMC feature x</td>
</tr>
<tr>
<td>testtrap</td>
<td>test CMC SNMP trap notifications</td>
</tr>
<tr>
<td>traceroute</td>
<td>determine the route of a packet</td>
</tr>
<tr>
<td>traceroute6</td>
<td>determine the route of a packet</td>
</tr>
</tbody>
</table>

Example for RACADM ? < subcommand>

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>racadm ? getsysinfo</td>
<td>display general CMC and system information</td>
</tr>
</tbody>
</table>

Usage:

----------------------------------------------------------------------------------
| Valid Options:                  |
| -d : show CMC information       |
| -c : show chassis information   |
| -A : do not show headers or labels |
|----------------------------------------------------------------------------------
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, group, object, or FQDD alternate name after help.

Synopsis
- racadm help
- racadm help <subcommand>

Input
None

Output
- The help command displays a complete list of subcommands.
- The racadm help <subcommand> command displays information for the specified subcommand only.
- The racadm help -g <groupname> command displays information for the specified group.
- The racadm help -o <objectname> command displays information for the specified object.
- The racadm help <FQDD Alias>.<Group> command displays information for the specified group.
- The racadm help <FQDD Alias>.<Object> command displays information for the specified object.
- The racadm help <FQDD Alias>.<Group>.<Object> command displays information for the specified object.

Example
racadm help system.power
racadm help system.power.supply

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
  - 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.
• -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 CMC Login User permission is required.

Example

- Display the number of records present in the Chassis Log:
  ```
  racadm chassislog view -i
  ```
- 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.

Synopsis

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

- racadm chassislog export -f <filename> -u <username> -p <password> -l <CIFS share>
- racadm chassislog export -f <filename> -l <NFS share>
- racadm -r <cmcip> -u <cmc username> -p <cmc password> chassislog export -f <filename> -u <username> -p <password> -l <CIFS share>
- racadm -r <cmcip> -u <cmc username> -p <cmc password> chassislog export -f <filename> -l <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 //192.168.0.5/share
  ```
- Export the Chassis Log to a remote NFS share
  ```
  racadm chassislog export -f Mylog.xml -l 192.168.0.5:/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 <cmcip> -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 192.168.0.1 -u root -p <default root user password> chassislog clear

NOTE: The default local account credential is root (user name) and calvin (user password).

chassisaction

Description
Executes a power action on the chassis or a switch.

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 to 2
• <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`

### 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 <group name> -o <object name> [-i <index>] <value>

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

#### Input
- `-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 running 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 192.168.0.1.
  Sets the cfgNicIpAddress configuration parameter (object) to the value 192.168.0.1. 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] -m <module>
• 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 to 4
• server-<nx>: where n = 1 to 4 and x = a to d (lower case)

NOTE: The values 2 and 4 for n are valid only for multi-node sleds.
• switch-<n>: where n = 1 to 2 or a1 | a2

Examples
• Connect to I/O Module 1 serial console
  racadm connect -m switch-1
• Connect to server 1 serial console
  racadm connect -m server-1
deploy

Description

Deploys blade server or IOM by specifying the required properties.

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, 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 — server/switch. Applies options to all modules present in the chassis of the given module type. Specify the value as server or switch. Default value is server. Switches must support Ethernet Management.
- -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. Required Username when you are setting IOA values.
- -m <module> — Specifies the server you want to configure.

Legal value must be one of the following values:
- server-n where n=1–4
- switch-n where n=1–2.
- -p <password> — Specifies the password for the root user on the server or switch.

Legal values: For switches, valid passwords are 6 - 32 ASCII characters in length, ranging in value 32–125 (decimal). For servers, valid passwords are 1 – 20 ASCII characters in length, ranging in value 32 – 126 (decimal). 
- -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).
- -v — SNMPv2 community string.

**NOTE:** This input is available in IOA only.
- -q — Displays or modifies the quick deploy parameters.
- -n — Specifies the number of reserved IP addresses for quick deploy. The valid values are 2 and 4.
Output

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 <default root user password> -s -6 ::/64 :: 10

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
• 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, 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 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 FlexAddressPlus.

⚠️ **NOTE:** The `-r` switch requires that the ExtendedStorage feature be deactivated.

⚠️ **CAUTION:** Using the `-r` switch reformats the SD media in the 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`

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

**fwupdate**

**Description**

Allows you to update the CMC firmware, chassis infrastructure firmware. 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 CMC firmware resets the CMC, causing all network connections to get logged off.

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

The CMC firmware performs a signature verification step to ensure the authenticity of the uploaded firmware. The firmware update process is successful only if the firmware image is authenticated by CMC to be a valid image from the service provider and has not been altered. The firmware update process is stopped if CMC cannot verify the signature of the uploaded firmware image. A warning event is then logged and an appropriate error message is displayed.

**Synopsis**

- Using Remote RACADM:
  
  ```bash
  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.

  **NOTE:** While performing firmware CMC firmware upgrade if the uploaded firmware image file does not contain a verification signature or it contains a verification signature, which is not valid or corrupted, the following message is displayed:

  `Invalid firmware: The firmware image validation was unsuccessful`

  **NOTE:** While performing CMC firmware downgrade if the computed signature of that earlier version is not recognized by the current CMC firmware, the following message is displayed:

  `Firmware downgrade is unsuccessful: a downgrade to this firmware version is not supported`

-  
  ```bash
  racadm fwupdate -g -u -a 192.168.0.100 -d firmimg.cmc -m
  ```
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
  - iominf-n, where n = 1
  - main-board
  - 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 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.

Displays a message indicating the operation that is being performed.

NOTE: The following commands apply to CMC update.

- Upload a firmware image from the client and start firmware update:
  \[ \text{racadm fwupdate -p -u -d fx2_cmos.bin} \]
- Upload the firmware image from the TFTP server and start the firmware update:
  \[ \text{racadm fwupdate -g -u -a 192.168.0.100 -d fx2_cmos.bin -m cmc-active} \]
  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.
  \[ \text{racadm fwupdate -f 192.168.0.100 root <default root password> -d fx2_cmos.bin -m} \]
- Start IOM infrastructure firmware update.
  \[ \text{racadm fwupdate -u -m iominf-1} \]
- View the current firmware update status:
  \[ \text{racadm fwupdate -s -m} \]
- Signed CMC Firmware Image:

```
racadm fwupdate -g -u -a <TFTP IP> -d <Firmware Path> -m
```

Firmware update has been initiated. This update process may take Several minutes to complete.
```
racadm fwupdate -s -m cmc-active
```

Invalid firmware: The uploaded firmware image does not contain A verification signature.

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

<table>
<thead>
<tr>
<th>FW Update Method</th>
<th>CMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local RACADM</td>
<td>No</td>
</tr>
<tr>
<td>Local RACADM - TFTP</td>
<td>No</td>
</tr>
<tr>
<td>Local RACADM - FTP</td>
<td>No</td>
</tr>
<tr>
<td>Remote RACADM</td>
<td>Yes</td>
</tr>
<tr>
<td>Remote RACADM-TFTP</td>
<td>Yes</td>
</tr>
<tr>
<td>Remote RACADM-FTP</td>
<td>Yes</td>
</tr>
<tr>
<td>Firmware RACADM-TFTP</td>
<td>Yes</td>
</tr>
<tr>
<td>Firmware RACADM-FTP</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**get**

**Description**
Saves CMC configuration properties or CMC Event Filter configurations to a file.

- **NOTE:** If CMC is not in the network, you cannot export the chassis configuration profile to a remote network share with proxy using the `get` command. But, you can export the chassis configuration profile to the local management station.

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

racadm -r <CMC IP> -u <username> -p <password> get -f <filename>

racadm -r <CMC IP> -u <username> -p <password> get -f <filename> -t xml

racadm get -f <filename> -t xml -u <username> -p <password> -l <CIFS share>

racadm get -f <filename> -t xml -l <NFS share>
```

**Input**
- `-f`: save event filter configurations to a file.
- `-u`: username of the remote share where the file must be exported.
- `-p`: password for the remote share where the file must be exported.
- `-l`: network share location where the file must be exported.
- `-t`: specify the file type that has to be exported. Valid value is "XML".
- `--clone`: export the cloned configuration file. Only the XML file format is supported. The configuration file can be exported to a local or remote share.
• --replace: export the replaced configuration file. Only XML file format is supported. The configuration file can be exported to a local or remote share.
• --includeph: include password hash attributes

Example

• Export event filter configurations to a file by using remote racadm.
  racadm -r 192.168.0.120 -u abc -p <password> get -f file.txt
• Export the CMC XML configuration to a local share using remote racadm
  racadm -r 192.168.0.120 -u abc -p <password> get -f file.xml -t xml
• Export the CMC XML configuration to a CIFS share
  racadm get -f file.xml -t xml -u myuser -p mypass -l //192.168.0.0/share
• Export the CMC XML configuration to an NFS share
  racadm get -f file.xml -t xml -l 192.168.0.0:/myshare

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 to 2
cmc-n, where n = 1
fan-n, where n = 1 to 8
ps-n, where n = 1 or 2
chassis

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>]
-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 CMC configuration parameters individually, or all CMC 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 CMC 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.
- -m — Indicates the module on which you want to carry out the action. The -m or <module> displays the following information for a particular server, group of servers, individual storage, or storage groups:
  - session
  - WEB/SSH/Telnet
  - remote system log
  - storage mode
  - service tag
  - asset tag

The <module> must have one of the following values:
– server-<n> — where n = 1 to 4
– server-<nx> — where n = 1 to 4 and x = a to d (lower case). The n = 2 and 4 are valid for multi-node sleds only.
– storage-<n> — where n = 1 to 4

NOTE: The -m option is available only for cfgRemoteHosts, cfgRacTuning, cfgSessionManagement, cfgLanNetworking, and cfgIPv6LanNetworking commands.

- -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 CMC to myrac.cfg.
  racadm getconfig -f myrac.cfg

If you do not configure the following key attributes in their respective groups for a particular index, the groups are not saved in to the file. This is applicable for all the index groups.

<table>
<thead>
<tr>
<th>Group</th>
<th>Key Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>cfgEmailAlert</td>
<td>cfgEmailAlertAddress</td>
</tr>
<tr>
<td>cfgLDAPRoleGroup</td>
<td>cfgLDAPRoleGroupDN</td>
</tr>
<tr>
<td>cfgServerInfo</td>
<td>cfgServerBmcMacAddress</td>
</tr>
<tr>
<td>cfgStandardSchema</td>
<td>cfgSSIDRoleGroupName</td>
</tr>
<tr>
<td>cfgTraps</td>
<td>cfgTrapsAlertDestIPAddr</td>
</tr>
<tr>
<td>cfgUserAdmin</td>
<td>cfgUserAdminUserName</td>
</tr>
</tbody>
</table>

- Displays a list of the available configuration groups on CMC 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
- Displays the storage sled information.
  racadm getconfig -g cfgStoragemodule -m storage-3
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

<table>
<thead>
<tr>
<th>&lt;IO#&gt;</th>
<th>&lt;Type&gt;</th>
<th>&lt;State&gt;</th>
<th>&lt;Role&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>switch-1</td>
<td>Gigabit Ethernet</td>
<td>OK</td>
<td>Master</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>&lt;Server#&gt;</th>
<th>&lt;Presence&gt;</th>
<th>&lt;DC1 Type&gt;</th>
<th>&lt;DC1 State&gt;</th>
<th>&lt;DC2 Type&gt;</th>
<th>&lt;DC2 State&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>server-1</td>
<td>Present</td>
<td>PCIe</td>
<td>OK</td>
<td>PCIe</td>
<td>OK</td>
</tr>
<tr>
<td>server-2</td>
<td>Not Present</td>
<td>None</td>
<td>N/A</td>
<td>None</td>
<td>N/A</td>
</tr>
<tr>
<td>server-3</td>
<td>Present</td>
<td>PCIe</td>
<td>OK</td>
<td>None</td>
<td>N/A</td>
</tr>
<tr>
<td>server-4</td>
<td>Not Present</td>
<td>None</td>
<td>N/A</td>
<td>None</td>
<td>N/A</td>
</tr>
</tbody>
</table>

```
getdcinfo -n
```

<table>
<thead>
<tr>
<th>&lt;Server#&gt;</th>
<th>&lt;Presence&gt;</th>
<th>&lt;DC1 Model Name&gt;</th>
<th>&lt;DC2 Model Name&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>server-1</td>
<td>Present</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>server-2</td>
<td>Not Present</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>server-3</td>
<td>Not Present</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>server-4</td>
<td>Present</td>
<td>None</td>
<td>Broadcom M5708t</td>
</tr>
</tbody>
</table>
**getsleduplinkstatus**

**Description**
Displays multi-node sled network switch uplink status.

**Synopsis**
racadm getsleduplinkstatus

**Examples**
racadm getsleduplinkstatus

<table>
<thead>
<tr>
<th>Sled No</th>
<th>Port No</th>
<th>A1 Link Status</th>
<th>A2 Link Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>Up</td>
<td>Down</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Up</td>
<td>Up</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>Up</td>
<td>Down</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Up</td>
<td>Up</td>
</tr>
</tbody>
</table>

**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.

The decoder values in the **Type** column indicate the protocols of the network cards:

- 0 — Unsupported
- 1 — iSCSI
- 2 — FCoE-FIP
- 3 — iSCSI/FCoE-FIP

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

**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

<table>
<thead>
<tr>
<th>&lt;Slot#&gt;</th>
<th>&lt;Status&gt;</th>
<th>&lt;Server Presence&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Enabled</td>
<td>Present</td>
</tr>
</tbody>
</table>
### 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

<table>
<thead>
<tr>
<th>Fabric</th>
<th>Type</th>
<th>Server-Assigned</th>
<th>Chassis-Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>slot1a</td>
<td>Controller</td>
<td>18:A9:9B:FD:C3:FF</td>
<td>F0:1F:AF:88:21:A0(active)</td>
</tr>
<tr>
<td>FCoE-WWN</td>
<td>10:00:00:90:FA:51:31:E3</td>
<td>20:01:F0:1F:AF:88:21:A3(active)</td>
<td></td>
</tr>
<tr>
<td>FCoE-WWN</td>
<td>10:00:00:90:FA:51:31:E5</td>
<td>20:01:F0:1F:AF:88:22:75(active)</td>
<td></td>
</tr>
<tr>
<td>FCoE- WWN</td>
<td>10:00:00:90:FA:51:31:E5</td>
<td>20:01:F0:1F:AF:88:22:75(active)</td>
<td></td>
</tr>
<tr>
<td>Protocol</td>
<td>MAC Address</td>
<td>WWN Address</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------------</td>
<td>------------------------------</td>
<td></td>
</tr>
<tr>
<td>slot1-A2</td>
<td>10 GbE KR</td>
<td>00:90:FA:51:31:EA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>F0:1F:AF:88:21:A2 (active)</td>
<td></td>
</tr>
<tr>
<td>FCoE-WWN</td>
<td>10:00:00:90:FA:51:31:EB</td>
<td>20:01:F0:1F:AF:88:21:A4 (active)</td>
<td></td>
</tr>
<tr>
<td>FCoE-WWN</td>
<td>10:00:00:90:FA:51:31:EC</td>
<td>20:01:F0:1F:AF:88:22:74 (active)</td>
<td></td>
</tr>
<tr>
<td>FCoE-WWN</td>
<td>10:00:00:90:FA:51:31:ED</td>
<td>20:01:F0:1F:AF:88:22:76 (active)</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** 10 GbE KR/3 — The value 3 indicates the protocol type.

**getioinfo**

**Description**

Displays general information about the stack and 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`
- `racadm getioinfo [-m <module>]`
- `racadm getioinfo [-m <module>] [-s]`

### Input
- `-m` — Specifies the module or device. The `<module>` must be `switch — <n>`, where `n = 1-2`
- `-s` — Displays the stack information.

### Example
- `racadm getioinfo`

<table>
<thead>
<tr>
<th>&lt;IO&gt;</th>
<th>&lt;Name&gt;</th>
<th>&lt;Type&gt;</th>
<th>&lt;Presence&gt;</th>
<th>&lt;POST&gt;</th>
<th>&lt;Power&gt;</th>
<th>&lt;Role&gt;</th>
<th>&lt;Secure Mode&gt;</th>
<th>&lt;Mode&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>switch-1</td>
<td>N/A</td>
<td>None</td>
<td>Not Present</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>switch-2</td>
<td>PE</td>
<td>10 Gigabit Ethernet</td>
<td>Present</td>
<td>OK</td>
<td>ON</td>
<td>Master</td>
<td>No</td>
<td>N/A</td>
</tr>
</tbody>
</table>

- `racadm getioinfo -m switch-1`

<table>
<thead>
<tr>
<th>&lt;IO&gt;</th>
<th>&lt;Name&gt;</th>
<th>&lt;Type&gt;</th>
<th>&lt;Presence&gt;</th>
<th>&lt;POST&gt;</th>
<th>&lt;Power&gt;</th>
<th>&lt;Role&gt;</th>
<th>&lt;Secure Mode&gt;</th>
<th>&lt;Mode&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch-1</td>
<td>1Gbe Pass-Through Module</td>
<td>Gigabit Ethernet</td>
<td>Present</td>
<td>OK</td>
<td>ON</td>
<td>Master</td>
<td>No</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### 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` or `4`
  - `switch-n` where `n = 1` or `2`
  - `chassis`
  - `CMC active`

### Example
For CMC:
- `racadm getled -m server-4`
  
  `<module> <LED state> server-4 Blinking`
- racadm getled -m chassis
  <module> <LED state> server-4 Not blinking
- racadm getled -m server-1
  <module> <LED state> server-1 ON
- racadm getled -m server-1
  <module> <LED state> server-1 Extension(1)

**getmacaddress**

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

The decoder values in the **Type** column indicate the protocols of the network cards.
- 0 — Unsupported
- 1 — iSCSI
- 2 — FCoE-FIP
- 3 — iSCSI/FCoE-FIP

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

**Synopsis**
- racadm getmacaddress
- racadm getmacaddress -m chassis
- racadm getmacaddress -m switch-<n>
- racadm getmacaddress [-m <module>] [-t iscsi] [-x]
- racadm getmacaddress [-a]
- racadm getmacaddress -c IO-Identity
- racadm getmacaddress -c Flexaddress
- racadm getmacaddress -c Factory
- racadm getmacaddress -c all

**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=1–2
- -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.
- -c — Displays the Ethernet, iSCSI, MAC/WWN, assignment type, and partition status of all LOMs or mezzanine cards. Valid values for -c option are:
  - **IO-Identity** — Displays the user-defined MAC/WWN addresses.
  - **FlexAddress** — Displays the chassis assigned WWN/MAC addresses.
  - **Factory** — Displays the MAC/WWN addresses for all LOMs or mezzanine cards.
  - **all** — Displays the console assigned MAC/WWN of all LOMs or mezzanine cards.

**Example**
- Displays the NDC or LOM MAC address.
  racadm getmacaddress
• 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

• Displays the user-defined MAC and WWN address.

  - racadm getmacaddress -c io-identity
  - racadm getmacaddress -c io-identity -m server -2

• Displays the console assigned MAC/WWN of all LOMs or mezzanine cards.

  racadm getmacaddress -c all

• Displays the chassis assigned WWN/MAC address.

  racadm getmacaddress -c flexaddress

• Displays the MAC/WWN addresses for all LOMs or mezzanine cards.

  racadm getmacaddress -c factory

Displays the MAC address for chassis.

  racadm getmacaddress -m chassis

<table>
<thead>
<tr>
<th>Name</th>
<th>Presence</th>
<th>BMC MAC Address</th>
<th>NIC1 MAC Address</th>
<th>NIC2 MAC Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMC</td>
<td>Present</td>
<td>N/A</td>
<td>74:86:7A:D5:33:44</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Displays the MAC address for switch –1

  racadm getmacaddress -m switch-1

<table>
<thead>
<tr>
<th>Name</th>
<th>Presence</th>
<th>BMC MAC Address</th>
<th>NIC1 MAC Address</th>
<th>NIC2 MAC Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch-1</td>
<td>Present</td>
<td>Not Installed</td>
<td>00:00:00:00:00:00</td>
<td>Not Installed</td>
</tr>
</tbody>
</table>

Displays the MAC address for switch –1

  racadm getmacaddress -m server-1

<table>
<thead>
<tr>
<th>Name</th>
<th>Presence</th>
<th>BMC MAC Address</th>
<th>NIC1 MAC Address</th>
<th>NIC2 MAC Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server-1b</td>
<td>Not Present</td>
<td>Not Installed</td>
<td>Not Installed</td>
<td>Not Installed</td>
</tr>
</tbody>
</table>

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

  racadm getmacaddress -m server-1 -x
<table>
<thead>
<tr>
<th>&lt;Name&gt;</th>
<th>&lt;Presence&gt;</th>
<th>&lt;BMC MAC Address&gt;</th>
<th>&lt;NIC1 MAC Address&gt;</th>
<th>&lt;NIC2 MAC Address&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Displays the MAC address.

```
racadm getmacaddress
```

<table>
<thead>
<tr>
<th>&lt;Name&gt;</th>
<th>&lt;Type&gt;</th>
<th>&lt;Presence&gt;</th>
<th>&lt;BMC MAC Address&gt;</th>
<th>&lt;NIC1 MAC Address&gt;</th>
<th>&lt;NIC2 MAC Address&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMC</td>
<td>N/A</td>
<td>Present</td>
<td>N/A</td>
<td>74:86:7A:D5:33:4</td>
<td>N/A</td>
</tr>
<tr>
<td>Server-2</td>
<td>Not Installed</td>
<td>Not Present</td>
<td>Not Installed</td>
<td>Not Installed</td>
<td>Not Installed</td>
</tr>
</tbody>
</table>

Displays Ethernet and iSCSI MAC address of all LOMs or mezzanine cards.

```
racadm getmacaddress -c IO-Identity
```

<table>
<thead>
<tr>
<th>&lt;Name&gt;</th>
<th>&lt;Presence&gt;</th>
<th>&lt;BMC MAC Address&gt;</th>
<th>&lt;NIC1 MAC Address&gt;</th>
<th>&lt;NIC2 MAC Address&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMC</td>
<td>Present</td>
<td>N/A</td>
<td>00:1E:4F:1F:3C:58</td>
<td>N/A</td>
</tr>
<tr>
<td>Server-2</td>
<td>Present</td>
<td>00:22:19:D2:1E:84</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Server-3</td>
<td>Not Present</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Server-4</td>
<td>Present</td>
<td>00:18:8B:FF:45:2A</td>
<td>00:18:8B:FF:AA:02</td>
<td>00:18:8B:FF:AA:04</td>
</tr>
<tr>
<td>Switch-1</td>
<td>Present</td>
<td>N/A</td>
<td>00:00:00:00:00:00</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Displays the user-defined MAC and WWN address.

```
racadm getmacaddress -c IO-Identity
```
<table>
<thead>
<tr>
<th>&lt;Name&gt;</th>
<th>&lt;Type&gt;</th>
<th>&lt;Presence&gt;</th>
<th>&lt;Active WWN/MAC&gt;</th>
<th>&lt;Partition Status&gt;</th>
<th>&lt;Assignment Type&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>server-1-A</td>
<td>IDRAC-Controller</td>
<td>Present</td>
<td>18:A9:9B:FD:C4 :DF</td>
<td>N/A</td>
<td>Factory</td>
</tr>
<tr>
<td></td>
<td>Gigabit Ethernet</td>
<td>Present</td>
<td>00:0A:00:0A: 00:00</td>
<td>Unknown</td>
<td>IO-Identity</td>
</tr>
<tr>
<td></td>
<td>Gigabit Ethernet</td>
<td>Present</td>
<td>00:0A:00:0A: 00:01</td>
<td>Unknown</td>
<td>IO-Identity</td>
</tr>
<tr>
<td></td>
<td>Gigabit Ethernet</td>
<td>Present</td>
<td>00:0A:00:0A: 00:02</td>
<td>Unknown</td>
<td>IO-Identity</td>
</tr>
<tr>
<td></td>
<td>Gigabit Ethernet</td>
<td>Present</td>
<td>00:0A:00:0A: 00:03</td>
<td>Unknown</td>
<td>IO-Identity</td>
</tr>
</tbody>
</table>

Displays the MAC/WWN addresses for all LOMs or mezzanine cards.

```
racadm getmacaddress -c factory
```

<table>
<thead>
<tr>
<th>&lt;Name&gt;</th>
<th>&lt;Type&gt;</th>
<th>&lt;Presence&gt;</th>
<th>&lt;Active WWN/MAC&gt;</th>
<th>&lt;Partition Status&gt;</th>
<th>&lt;Assignment Type&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server-3-A</td>
<td>IDRAC-Controller</td>
<td>Present</td>
<td>5C:F9:DD:D6:1C: CE</td>
<td>N/A</td>
<td>Factory</td>
</tr>
<tr>
<td></td>
<td>Gigabit Ethernet</td>
<td>Present</td>
<td>84:8F: 69:FC:E8:F0</td>
<td>Unknown</td>
<td>IO-Identity</td>
</tr>
<tr>
<td></td>
<td>Gigabit Ethernet</td>
<td>Present</td>
<td>84:8F: 69:FC:E8:F1</td>
<td>Unknown</td>
<td>IO-Identity</td>
</tr>
<tr>
<td>Switch-1</td>
<td>10 GbE KR</td>
<td>Present</td>
<td>F8:B1:56:45:DD: BD</td>
<td>N/A</td>
<td>Factory</td>
</tr>
</tbody>
</table>

Displays the chassis assigned WWN/MAC address.

```
racadm getmacaddress -c flexaddress
```

<table>
<thead>
<tr>
<th>&lt;Name&gt;</th>
<th>&lt;Type&gt;</th>
<th>&lt;Presence&gt;</th>
<th>&lt;Active WWN/MAC&gt;</th>
<th>&lt;Partition Status&gt;</th>
<th>&lt;Assignment Type&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server-4-A</td>
<td>IDRAC-Controller</td>
<td>Present</td>
<td>F8:DB:88:3D: 9F:A7</td>
<td>N/A</td>
<td>FlexAddress</td>
</tr>
<tr>
<td></td>
<td>10 GbE KR</td>
<td>Present</td>
<td>F8:DB:88:3D: 9F:A9</td>
<td>Disabled</td>
<td>FlexAddress</td>
</tr>
<tr>
<td></td>
<td>10 GbE KR/3</td>
<td>Present</td>
<td>F8:DB: 88:3D:A2:78</td>
<td>Unknown</td>
<td>FlexAddress</td>
</tr>
<tr>
<td></td>
<td>10 GbE KR/3</td>
<td>Present</td>
<td>F8:DB: 88:3D:A2:7B</td>
<td>N/A</td>
<td>FlexAddress</td>
</tr>
</tbody>
</table>

**NOTE: 10 GbE KR/3— The value 3 indicates the protocol type.**

Displays the console assigned MAC/WWN of all LOMs or mezzanine cards.

```
racadm getmacaddress -c all
```
<Name>   <Type>       <Presence>    <Active WWN/MAC>   <Partition Status>   <Assignment Type>
Server-1-A IDRAC-Controller Present 18:A9:9B:FD:C4:DF N/A Factory
Gigabit Ethernet Present 00:0A:00:0A:00:00 Unknown IO-Identity
Server-3-A Gigabit Ethernet Present 4:8F:69:FC:E8:F1 Unknown Factory
Server-4-A 10 GbE KR/3 Present F8:DB:88:3D:A2:7A Unknown FlexAddress
FCoE-WWN Present 20:01:F8:DB:88:3D:A2:7A Unknown FlexAddress

getmodinfo

Description
Displays configuration and status information for all modules or a specified module (server, storage sled, switch, CMC, fan unit, blower, power supply unit, chassis, 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]ra

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
  - server-nx , where n = 1 to 4; x = a to d
  - switch-n , where n = 1 or 2
  - pcie-n , where n = 1 to 8
  - CMC-n , where n = 1
  - fan-n , where n = 1 to 8
  - ps-n , where n = 1 to 2
  - chassis
  - main-board
  - io-cable
  - fpc cable
- -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
  <module> <presence> <pwrState> <health> <svcTag> <node Id>

  Chassis Present ON OK ST0MP19 N/A
<table>
<thead>
<tr>
<th>Component</th>
<th>Present</th>
<th>Status</th>
<th>Health</th>
<th>IP Address</th>
<th>Subnet Mask</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main-Board</td>
<td>Present</td>
<td>ON</td>
<td>OK</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Storage-2</td>
<td>Present</td>
<td>OFF</td>
<td>Not OK</td>
<td>666666666</td>
<td>N/A</td>
</tr>
<tr>
<td>Storage-3</td>
<td>Present</td>
<td>OFF</td>
<td>Not OK</td>
<td>666666666</td>
<td>N/A</td>
</tr>
<tr>
<td>Storage-4</td>
<td>Present</td>
<td>OFF</td>
<td>OK</td>
<td>666666666</td>
<td>N/A</td>
</tr>
<tr>
<td>Fan-1</td>
<td>Present</td>
<td>ON</td>
<td>OK</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Fan-2</td>
<td>Present</td>
<td>ON</td>
<td>Unknown</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Fan-3</td>
<td>Present</td>
<td>ON</td>
<td>Unknown</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Fan-4</td>
<td>Present</td>
<td>ON</td>
<td>Unknown</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Fan-5</td>
<td>Present</td>
<td>ON</td>
<td>OK</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Fan-6</td>
<td>Present</td>
<td>ON</td>
<td>Unknown</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Fan-7</td>
<td>Present</td>
<td>ON</td>
<td>Unknown</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Fan-8</td>
<td>Present</td>
<td>ON</td>
<td>Unknown</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>PS-1</td>
<td>Present</td>
<td>Online</td>
<td>OK</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>PS-2</td>
<td>Present</td>
<td>Online</td>
<td>OK</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CMC</td>
<td>Present</td>
<td>Primary</td>
<td>OK</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Switch-1</td>
<td>Present</td>
<td>ON</td>
<td>OK</td>
<td>0000000</td>
<td>N/A</td>
</tr>
<tr>
<td>Switch-2</td>
<td>Present</td>
<td>ON</td>
<td>OK</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Server-1</td>
<td>Present</td>
<td>OFF</td>
<td>OK</td>
<td>H23H23Z</td>
<td>H23H23Z</td>
</tr>
<tr>
<td>Server-2a</td>
<td>Present</td>
<td>OFF</td>
<td>OK</td>
<td>JD3FRTW</td>
<td>JD3FRTWa</td>
</tr>
<tr>
<td>Server-2b</td>
<td>Present</td>
<td>OFF</td>
<td>OK</td>
<td>JD3FRTW</td>
<td>JD3FRTWb</td>
</tr>
<tr>
<td>Server-2c</td>
<td>Present</td>
<td>OFF</td>
<td>OK</td>
<td>JD3FRTW</td>
<td>JD3FRTWc</td>
</tr>
<tr>
<td>Server-2d</td>
<td>Present</td>
<td>OFF</td>
<td>OK</td>
<td>JD3FRTW</td>
<td>JD3FRTWd</td>
</tr>
<tr>
<td>Cable-I0</td>
<td>Present</td>
<td>ON</td>
<td>OK</td>
<td>STOMP11</td>
<td>N/A</td>
</tr>
<tr>
<td>Cable-C0</td>
<td>Present</td>
<td>ON</td>
<td>OK</td>
<td>STOMP11</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**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:

- \texttt{chassis}
  : default state if \(-m\) is not specified
- \texttt{server-n}
  : where \(n = 1\) to 4
- \texttt{switch-n}
  : where \(n = 1\) or 2

**Example**

```bash
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 = 192.168.0.12
Current Subnet Mask = 255.255.255.0
Current Gateway = 192.168.0.1
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
```

```bash
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 = 192.168.0.18
Subnet Mask = 255.255.255.0
Gateway = 192.168.0.1
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 = 192.168.0.12
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:**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIC Enabled</td>
<td>1</td>
</tr>
<tr>
<td>IPv4 Enabled</td>
<td>1</td>
</tr>
<tr>
<td>DHCP Enabled</td>
<td>1</td>
</tr>
<tr>
<td>IP Address</td>
<td>192.168.0.12</td>
</tr>
<tr>
<td>Subnet Mask</td>
<td>255.255.255.0</td>
</tr>
<tr>
<td>Gateway</td>
<td>192.168.0.1</td>
</tr>
</tbody>
</table>
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 = 90 W
Peak System Power = 93 W
Peak System Power Timestamp = 20:28:32 03/04/2014
Minimum System Power = 83 W
Minimum System Power Timestamp = 20:28:02 03/04/2014
Overall Power Health = OK
Redundancy = Yes
System Input Power Cap = 3371 W
Redundancy Policy = Redundancy Alerting Only
System Input Max Power Capacity = 2382 W
Input Redundancy Reserve = 0 W
Max Power Conservation Mode = 11:20:08 02/27/2014
Power Available for Server Power-on = 1965 W

[Chassis Power Supply Status Table]
<table>
<thead>
<tr>
<th>name</th>
<th>Model</th>
<th>Power State</th>
<th>Input Current</th>
<th>Input Volts</th>
<th>Output Rated Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS1</td>
<td>0CC6WF</td>
<td>Online</td>
<td>0.3 A</td>
<td>208.0 V</td>
<td>1100 W</td>
</tr>
<tr>
<td>PS2</td>
<td>0GYH9V</td>
<td>Online</td>
<td>0.3 A</td>
<td>209.0 V</td>
<td>1100 W</td>
</tr>
</tbody>
</table>

getpciecfg

Description
Displays the FQDD of the PCIe slots and their mapping information and properties.

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

NOTE: Lengthy PCIe card names and server slot names are truncated when the assignments for all PCIe slots are displayed.

Synopsis
racadm getpciecfg [-c <FQDD>]

Input
• -a — Use this option to display the assignment of PCIe slots.
• -c — Use this option to select a specific PCIe adapter or Virtual Adapter.
• FQDD — FQDD of the selected PCIe slot

Example
• Displays FQDDs of all the PCIe slots:
  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

• Displays the assignment of PCIe slots and Virtual Adapters:
  racadm getpciecfg -a
  <PCIe Slot#> <Name> <pwrState> <Server Slot Name> <Server Slot#>
  PCIe slot-1 PCIe Card 1 ON
  SLOT-04 4
  PCIe slot-2 Not Present N/A
  UNMAPPED N/A
  SLOT-03 3
  PCIe slot-3 PCIe Card 3 OFF
  UNMAPPED N/A
  SLOT-03 3
  PCIe slot-4 Extension PCIe Card 3 ON
  SLOT-03 3
  PCIe slot-5 PCIe Card 5 OFF
  SLOT-02 2
  PCIe slot-6 Not Present N/A
  UNMAPPED N/A
  PCIe slot-7 PCIe Card 7 ON
  localhost 1
  PCIe slot-8 Not Present N/A
  UNMAPPED N/A
• Displays the properties of a PCIe slot selected using FQDD:
  racadm getpciecfg -c pcie.chassisslot.1

getpminfo

Description
Displays power management status information.
To use this subcommand, you must have **CMC Login User** privilege.

Synopsis
racadm getpminfo

Example
```
[Real-Time Power Statistics]
System Input Power = 89 W (303 BTU/h)
Peak System Power = 93 W (317 BTU/h)
Peak System Power Start Time = 20:26:06 03/04/2014
Peak System Power Timestamp = 20:28:32 03/04/2014
Minimum System Power = 83 W (283 BTU/h)
Minimum System Power Start Time = 20:26:06 03/04/2014
Minimum System Power Timestamp = 20:28:02 03/04/2014
System Idle Power = 89 W (303 BTU/h)
System Potential Power = 417 W (1422 BTU/h)
System Input Current Reading = 0.6 A

[Real-Time Energy Statistics]
System Energy Consumption = 62.2 kWh
System Energy Consumption Start Time = 15:56:11 02/12/2014
System Energy Consumption Timestamp = 06:07:07 03/05/2014

[System Power Status]
Chassis Power State = ON
Overall Power Health = OK
Redundancy = Yes

[System Power Policy Configuration]
System Input Power Cap = 3371 W (11502 BTU/h | 100%)
Redundancy Policy = Redundancy Alerting Only

[Power Budgeting]
System Input Max Power Capacity = 2382 W
Input Redundancy Reserve = 0 W
Power Available for Server Power-on = 1965 W
```

gettracelog

Description
Lists all the trace log entries in CMC.

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

Input
```
• -i - Displays the number of entries in CMC 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

<table>
<thead>
<tr>
<th>Record</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date/Time</td>
<td>Dec 8 08:21:30</td>
</tr>
<tr>
<td>Source</td>
<td>ssnmgrd[175]</td>
</tr>
<tr>
<td>Description</td>
<td>root from 192.68.157.103: session timeout sid 0be6aef4</td>
</tr>
</tbody>
</table>

getractime

Description

Displays the current CMC time.

Synopsis

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

Input

- -d — Displays the time in the format, yyyymmddhhmnmss.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 CMC time is displayed.

Example

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

getsel

Description

Displays all sensor event log entries in the DRAC.

Synopsis

- racadm getsel -i [-A]

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

getslotname

Description

Displays the name, host name, and iDRAC DNS name 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, or iDRAC DNS 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.

NOTE: Lengthy slot names, host names, or iDRAC DNS names are truncated when the slot names are displayed.

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, iDRAC DNS name, or the host name (if available). The values are:
  – 0 — Displays the slot name
  – 1 — Displays the host name instead of the slot name
  – 2 — Displays the iDRAC DNS name instead of the slot name

Example

• Display all slots names.
  racadm getslotname

<table>
<thead>
<tr>
<th>&lt;Slot #&gt;</th>
<th>&lt;Slot Name&gt;</th>
<th>&lt;Host name&gt;</th>
<th>&lt;iDRAC DNS Name&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SLOT-01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Webserver01</td>
<td>WXP-8GRB221</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Webserver3</td>
<td>WXP-319QWEect5</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>SLOT-04</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• Display the name of the third slot.
  racadm getslotname -i 3

• Verify if the option ‘0’ is set for displaying the slot name.
• Verify if the option ‘1’ is set for displaying the host name.
• Verify if the option ‘2’ is set for displaying the iDRAC DNS name.
**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 : Voltage

<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Status</th>
<th>Reading</th>
<th>LC</th>
<th>UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU1 V CORE PG</td>
<td>OK</td>
<td>0</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>System Board 12V PG</td>
<td>OK</td>
<td>0</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>System Board 3.3V PG</td>
<td>OK</td>
<td>4037</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>System Board 5V PG</td>
<td>OK</td>
<td>4045</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>CPU1 PLL PG</td>
<td>OK</td>
<td>4107</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>System Board 1.5V PG</td>
<td>OK</td>
<td>0</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>System Board 1.1V PG</td>
<td>OK</td>
<td>0</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>CPU1 M01 V TT PG</td>
<td>OK</td>
<td>0</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>CPU1 M23 V DDQ PG</td>
<td>OK</td>
<td>0</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>CPU1 M23 V TT PG</td>
<td>OK</td>
<td>0</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>CPU1 V SA PG</td>
<td>OK</td>
<td>0</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>CPU1 M01 V DDQ PG</td>
<td>OK</td>
<td>0</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>NDC PG</td>
<td>OK</td>
<td>0</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>CPU1 V TT PG</td>
<td>OK</td>
<td>0</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>MEZZB PG</td>
<td>OK</td>
<td>0</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>MEZZC PG</td>
<td>OK</td>
<td>0</td>
<td>600</td>
<td>N/A</td>
</tr>
<tr>
<td>PERC1 PG</td>
<td>OK</td>
<td>0</td>
<td>600</td>
<td>N/A</td>
</tr>
</tbody>
</table>
```

Sensor Type : Current
<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Status</th>
<th>Reading</th>
<th>LW</th>
<th>LC</th>
<th>UW</th>
<th>UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Board Current</td>
<td>OK</td>
<td>22</td>
<td>3</td>
<td>-7</td>
<td>42</td>
<td>47</td>
</tr>
</tbody>
</table>

**Sensor Type**: Processor

<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Status</th>
<th>AC-OK status</th>
<th>lc</th>
<th>uc</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU1 Status Detected</td>
<td>N/A</td>
<td>N/A</td>
<td>Presence</td>
<td></td>
</tr>
<tr>
<td>CPU2 Status Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sensor Type**: Memory

<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Status</th>
<th>State</th>
<th>lc</th>
<th>uc</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMM SLOT A1 Detected</td>
<td>N/A</td>
<td>N/A</td>
<td>Presence</td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT A2 Detected</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT A3 Detected</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT A4 Detected</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT A5 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT A6 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT A7 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT A8 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT A9 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT A10 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT A11 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT A12 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT A13 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT B1 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT B2 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT B3 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT B4 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT B5 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT B6 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT B7 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT B8 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT B9 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT B10 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT B11 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMM SLOT B12 Absent</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sensor Type**: Battery

<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Status</th>
<th>Reading</th>
<th>lc</th>
<th>uc</th>
</tr>
</thead>
</table>

---

53
getssninfo

Description
Displays a list of users that are connected to CMC. 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 CMC 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

<table>
<thead>
<tr>
<th>SSNID</th>
<th>Type</th>
<th>User</th>
<th>IP Address</th>
<th>Login Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>GUI</td>
<td>root</td>
<td>192.168.0.10</td>
<td>04/07/2010 12:00:34</td>
</tr>
</tbody>
</table>

racadm getssninfo -A
"root" "192.68.174.19" "Telnet" "NONE"

racadm getssninfo -A -u *
"root" "192.68.174.19" "Telnet" "NONE"
"bob" "192.68.174.19" "GUI" "NONE"

getstoragemoduleinfo

Description
Displays the storage module configuration and status information.

Synopsis
- racadm getstoragemoduleinfo
- racadm getstoragemoduleinfo <FQDD>

Input
- -c — The -c <FQDD> option can be used to view the details of a storage sled. The availability of this option is based on the <FQDD> input. This command is supported only when a storage sled is present in the CMC FX2/FX2s chassis.

Examples
racadm getstoragemoduleinfo
<table>
<thead>
<tr>
<th>Storage Slot</th>
<th>FQDD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage-1</td>
<td>N/A</td>
</tr>
<tr>
<td>Storage-2</td>
<td>System.Modular.02</td>
</tr>
<tr>
<td>Storage-3</td>
<td>System.Modular.03</td>
</tr>
<tr>
<td>Storage-4</td>
<td>System.Modular.04</td>
</tr>
</tbody>
</table>

Display format of storage sled information when the storage mode is “joined” or has a single controller.

```bash
racadm getstoragemoduleinfo -c System.Modular.02
```

<table>
<thead>
<tr>
<th>Storage-2 FQDD</th>
<th>System.Modular.02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chassis Slot</td>
<td>2</td>
</tr>
<tr>
<td>Name</td>
<td>SLOT-02</td>
</tr>
<tr>
<td>Model</td>
<td>PowerEdge FD332</td>
</tr>
<tr>
<td>Status</td>
<td>Not OK</td>
</tr>
<tr>
<td>Service Tag</td>
<td>2435678</td>
</tr>
<tr>
<td>Asset Tag</td>
<td>ABCD12345</td>
</tr>
<tr>
<td>Intrusion State</td>
<td>Open</td>
</tr>
<tr>
<td>Storage Mode</td>
<td>Joined</td>
</tr>
<tr>
<td>Number of Controllers</td>
<td>1</td>
</tr>
<tr>
<td>FQDD</td>
<td>RAID.Modular.2-1</td>
</tr>
</tbody>
</table>

| Physical Disk Slots     | 0-15               |
| Connected Server        | SLOT-01            |
| Controller Mode Capability | HBA and RAID     |

Display format of storage sled information when the storage mode is “split single host”.

```bash
racadm getstoragemoduleinfo -c System.Modular.03
```

<table>
<thead>
<tr>
<th>Storage-2 FQDD</th>
<th>System.Modular.03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chassis Slot</td>
<td>3</td>
</tr>
<tr>
<td>Name</td>
<td>SLOT-03</td>
</tr>
<tr>
<td>Model</td>
<td>PowerEdge FD332</td>
</tr>
<tr>
<td>Status</td>
<td>Not OK</td>
</tr>
<tr>
<td>Service Tag</td>
<td>8748596</td>
</tr>
<tr>
<td>Asset Tag</td>
<td>KLOP98656</td>
</tr>
<tr>
<td>Intrusion State</td>
<td>Closed</td>
</tr>
<tr>
<td>Storage Mode</td>
<td>Split single host</td>
</tr>
<tr>
<td>Number of Controllers</td>
<td>2</td>
</tr>
<tr>
<td>FQDD</td>
<td>RAID.Modular.3-1</td>
</tr>
</tbody>
</table>

| Physical Disk Slots     | 0-7                |
| Connected Server        | SLOT-01            |
| Controller Mode Capability | HBA              |
| FQDD                    | RAID.Modular.3-2   |

| Physical Disk Slots     | 8-15               |
| Connected Server        | SLOT-1             |
| Controller Mode Capability | HBA              |

Display format of storage sled information when the storage mode is “Split dual host”.

```bash
racadm getstoragemoduleinfo -c System.Modular.03
```

<table>
<thead>
<tr>
<th>Storage-3 FQDD</th>
<th>System.Modular.03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chassis Slot</td>
<td>3</td>
</tr>
<tr>
<td>Name</td>
<td>SLOT-03 (Storage)</td>
</tr>
<tr>
<td>Model</td>
<td>PowerEdge FD332</td>
</tr>
<tr>
<td>Status</td>
<td>OK</td>
</tr>
<tr>
<td>Service Tag</td>
<td>4657248</td>
</tr>
<tr>
<td>Asset Tag</td>
<td>ERHJ57834</td>
</tr>
<tr>
<td>Intrusion State</td>
<td>Closed</td>
</tr>
<tr>
<td>Storage Mode</td>
<td>Split dual host</td>
</tr>
<tr>
<td>Number of Controllers</td>
<td>1</td>
</tr>
<tr>
<td>FQDD</td>
<td>RAID.Modular.3-1</td>
</tr>
</tbody>
</table>
**Physical Disk Slots** = 0-7
**Connected Server** = SLOT-01
**Controller Mode Capability** = RAID

**FQDD** = RAID.Modular.2-1

**Physical Disk Slots** = 8-15
**Connected Server** = SLOT-2
**Controller Mode Capability** = HBA and RAID

Display format when storage sleds are not installed on the CMC FX2 or CMC FX2s system.

```bash
cadm getstoragemoduleinfo
```

This command is not supported on this configuration.

---

**getsvctag**

**Description**

Displays the Service Tag of the host system.

**Synopsis**

```bash
cadm getsvctag
```

**Input**

- `getsvctag`

**Output**

<table>
<thead>
<tr>
<th>Module</th>
<th>Service Tag</th>
<th>Node Id</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chassis</td>
<td>STPST02</td>
<td>N/A</td>
</tr>
<tr>
<td>Switch-1</td>
<td>0000000</td>
<td>N/A</td>
</tr>
<tr>
<td>Switch-2</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Server-1</td>
<td>FC830</td>
<td>FC830</td>
</tr>
<tr>
<td>Server-2</td>
<td>Extension(1)</td>
<td>N/A</td>
</tr>
<tr>
<td>Storage-3</td>
<td>7647563</td>
<td>N/A</td>
</tr>
<tr>
<td>Storage-4</td>
<td>7654321</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Example**

```bash
cadm 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**

```bash
```

**Input**

- `[-d]` - Displays CMC information.
- `[-c]` - Displays chassis information.
- `[-A]` - Does not display headers and labels.

**Output**

**CMC Information:**

- **CMC Date/Time** = Tue Jan 29 2013 23:00
- **CMC Location** = CMC-1
- **Primary CMC Location** = 4.40
- **CMC Version** = A04
- **Last Firmware Update** = Mon Jan 28 2013 08:41
- **Hardware Version** = A04
CMC Network Information:
NIC Enabled               = 1
MAC Address               = D4:AE:52:AC:CA:C6
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        = 192.168.164.115
Current IP Gateway        = 192.168.164.1
Current IP Netmask        = 255.255.255.0
DHCP Enabled              = 1
Current DNS Server 1      = 192.168.165.80
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 FX2s
System AssetTag           = 00000
Service Tag               = STPST06
Express Service Code      = 62746758870
Chassis Name              = CMC-STPST06
Chassis Location          = [UNDEFINED]
Chassis Midplane Version  = 1.0
Power Status              = ON
System ID                 = 1488
PCIe Switch Board Type    = Gen 3

NOTE: In the Chassis Information output, the PCIe Switch Board Type information is displayed only for PowerEdge FX2s chassis model.

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 CMC.

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

Input
- -i - Displays the number of entries in CMC 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 192.68.157.103: session timeout sid 0be0aeef4

getversion

Description
Displays the current software version, model and generation information, 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.

<table>
<thead>
<tr>
<th>&lt;Server&gt;</th>
<th>&lt;iDRAC Version&gt;</th>
<th>&lt;Blade Type&gt;</th>
<th>&lt;Gen&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>server-1a</td>
<td>2.20.20.20 (38)</td>
<td>PowerEdge</td>
<td>Y</td>
</tr>
<tr>
<td>FC430</td>
<td>iDRAC8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>&lt;Switch&gt;</th>
<th>&lt;Model Name&gt;</th>
<th>&lt;HW Version&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>switch-1</td>
<td>10GBE ETHERNET MODULE</td>
<td>A00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>&lt;CMC&gt;</th>
<th>&lt;CMC Version&gt;</th>
<th>&lt;Updatable&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>cmc</td>
<td>1.30.200.201507292443</td>
<td>Y</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>&lt;Chassis Infrastructure&gt;</th>
<th>&lt;FW Version&gt;</th>
<th>&lt;FQDD&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Board</td>
<td>1.10.X01.201407023</td>
<td>System.Chassis.1#Infrastructure.1</td>
</tr>
</tbody>
</table>

- -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.
- **-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.
  - **switch-n**, where n = 1 to 2.
  - **CMC**
  - **mainboard**

**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 **Administrator** privilege.

**Synopsis**

```
racadm ifconfig
```

**Example**

```bash
$ racadm ifconfig
eth0      Link encap:Ethernet  HWaddr 00:1D:09:FF:DA:23
          inet addr:192.168.0.1  Bcast:192.168.0.120
          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 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 yyyymmddhhmms format. If you specify TIME_NOW, the job is immediately run.
- `Expiration time` — Specifies the expiry time for the job to complete in yyyymmddhhmms format. If you specify TIME_NA, the wait-time is not applicable for the job.

**Example**
- Display all the jobs:
  ```none```
  ![Example Output](image)
  ```none```
- Delete the specified job:
  ```none```
  `racadm jobqueue delete -i RID_860202993201`
  `racadm jobqueue delete -i <JobID>`

**krbkeytabupload**

**Description**
Uploads a Kerberos keytab file.

To run this subcommand, you must have the Configure Chassis Administrator privilege.

**Synopsis**
- `racadm krbkeytabupload [-f <filename>]`

<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 and storage sled 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 view -c <storage sled FQDD>
- Import the license:
  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>] [-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 fewer than 56 Characters.

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 FX2/FX2s
    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
    ```
  - View the storage sled license information in the chassis.
    ```
    racadm license view -c <FQDD>
    
    System.Modular.03
    Status = OK
    Device = System.Modular.03
    Device Description = Dual PERC Controller for PowerEdge FD332
    Unique Identifier = PQR123
    License #1
    Status = OK
    Transaction ID = 522
    License Description = PowerEdge FD332 Dual RAID License
    
    License Type = PERPETUAL
    Entitlement ID = Q3nJiS1xnX4rdRlat24qjdfb
    License Bound = PQR243
    Expiration = Never Expires
    ```

- 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
    ```
- Import a storage sled license
  racadm license import -f
  nfs/"8YYGCVcSMcHD279crzqfZmvb_xyz_single raid.xml" -l
  192.168.2.140:/nfs -c System.Modular.04

- 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
    LicenseFile0.xml, LicenseFile1.xml, and so on. In this case, the device is an embedded
    CMC:
    racadm license export -u root -p <default root user
    password> -f LicenseFile.xml -l //192.168.2.140/licshare -c
    cmc.embedded.1
  - Export a storage sled license
    racadm license export -f nfs/"singleraid.xml" -l
    192.168.2.140:/nfs -c System.Modular.04

- 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
  - Delete a storage sled license. For example, System.Modular.03
    racadm license delete -c System.Modular.03

- Replace a license.
  - Replace the license on a device with a license file that is 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 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
  - Replace a storage sled license
    racadm license replace -f
    nfs/"CfDuqtnJTobaSYGNzmdA4Buz_xyz_dual.xml" -l
    192.168.2.209:/nfs -t 8

 netstat

 Description
 Displays the routing table and the current connections.
To use this subcommand, you must have the **Execute Diagnostic Commands** permission.

### Synopsis

```plaintext
racadm netstat
```

### Input

```plaintext
racadm netstat
```

### Output

#### Kernel IPv6 routing table

<table>
<thead>
<tr>
<th>Destination</th>
<th>Hop</th>
<th>Flags</th>
<th>Metric</th>
<th>Ref</th>
<th>Use</th>
<th>Iface</th>
</tr>
</thead>
<tbody>
<tr>
<td>::</td>
<td></td>
<td>U</td>
<td>0</td>
<td>30</td>
<td>1</td>
<td>lo</td>
</tr>
<tr>
<td>fe80::200:ff:fe00:d01/128</td>
<td>U</td>
<td>0</td>
<td>0</td>
<td>30</td>
<td>1</td>
<td>lo</td>
</tr>
<tr>
<td>fe80::/64</td>
<td>U</td>
<td>256</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>eth1</td>
</tr>
<tr>
<td>ff00::/8</td>
<td>U</td>
<td>256</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>eth1</td>
</tr>
</tbody>
</table>

#### Kernel IP routing table

<table>
<thead>
<tr>
<th>Destination</th>
<th>Gateway</th>
<th>Genmask</th>
<th>Flags</th>
<th>MSS</th>
<th>Window</th>
<th>Irtt</th>
<th>Iface</th>
</tr>
</thead>
<tbody>
<tr>
<td>192.168.161.0</td>
<td>0.0.0.0</td>
<td>255.255.255.0</td>
<td>U</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>bond0</td>
</tr>
<tr>
<td>0.0.0.0</td>
<td>198.168.161.1</td>
<td>0.0.0.0</td>
<td>UG</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>bond0</td>
</tr>
</tbody>
</table>

#### Active Internet connections (w/o servers)

<table>
<thead>
<tr>
<th>Proto</th>
<th>Recv-Q</th>
<th>Send-Q</th>
<th>Local Address</th>
<th>Foreign Address</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>tcp</td>
<td>0</td>
<td>0</td>
<td>127.0.0.1:8195</td>
<td>127.0.0.1:8195</td>
<td>ESTABLISHED</td>
</tr>
<tr>
<td>tcp</td>
<td>0</td>
<td>0</td>
<td>127.0.0.1:52887</td>
<td>127.0.0.1:52887</td>
<td>ESTABLISHED</td>
</tr>
<tr>
<td>tcp</td>
<td>0</td>
<td>0</td>
<td>127.0.0.1:199</td>
<td>127.0.0.1:199</td>
<td>ESTABLISHED</td>
</tr>
<tr>
<td>tcp</td>
<td>0</td>
<td>0</td>
<td>127.0.0.1:199</td>
<td>127.0.0.1:199</td>
<td>ESTABLISHED</td>
</tr>
<tr>
<td>tcp</td>
<td>0</td>
<td>0</td>
<td>127.0.0.1:199</td>
<td>127.0.0.1:199</td>
<td>ESTABLISHED</td>
</tr>
<tr>
<td>tcp</td>
<td>0</td>
<td>0</td>
<td>127.0.0.1:199</td>
<td>127.0.0.1:199</td>
<td>ESTABLISHED</td>
</tr>
<tr>
<td>tcp</td>
<td>0</td>
<td>0</td>
<td>192.168.155.20:45106</td>
<td>192.168.155.20:45106</td>
<td>ESTABLISHED</td>
</tr>
<tr>
<td>tcp</td>
<td>0</td>
<td>0</td>
<td>127.0.0.1:52174</td>
<td>127.0.0.1:52174</td>
<td>ESTABLISHED</td>
</tr>
<tr>
<td>tcp</td>
<td>0</td>
<td>0</td>
<td>127.0.0.1:199</td>
<td>127.0.0.1:199</td>
<td>ESTABLISHED</td>
</tr>
<tr>
<td>tcp</td>
<td>0</td>
<td>0</td>
<td>127.0.0.1:8195</td>
<td>127.0.0.1:8195</td>
<td>ESTABLISHED</td>
</tr>
</tbody>
</table>

---

### ping

#### Description

Verifies that the destination IP address is reachable from CMC with the current routing-table contents. A destination IP address 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.

#### Synopsis

```plaintext
racadm ping <ipaddress>
```
ping6

**Description**
Verifies that the destination IPv6 address is reachable from a 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 based on the current routing-table contents.

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

**Synopsis**
```
racadm ping6 <ipv6address>
```

**Example**
```
racadm iping6 192.168.0.2
```
```
IPING6 192.168.0.2 (192.168.0.2): 56 data bytes
64 bytes from 192.168.0.2: icmp_seq=0 ttl=121 time=2.9 ms
--- 192.168.0.2 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 **CMC Login User** 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 — gettraceinfo
- 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

Example

racadm racdump

General System/RAC Information

CMC Information:
CMC Date/Time           = Wed, 28 Nov 2007 11:55:49 PM
CMC Version             = X08
Hardware Version        = 2
Current IP Address      = 192.168.155.10
Current IP Gateway      = 192.168.155.1
Current IP Netmask      = 255.255.255.128
DHCP Enabled            = 1
MAC Address             = 00:55:AB:39:10:0F
Current DNS Server 1    = 0.0.0.0
Current DNS Server 2    = 0.0.0.0
DNS Servers from DHCP   = 0
Register DNS CMC Name   = 0
DNS CMC Name            = cmc-servicetag
Current DNS Domain      =

Chassis Information:
System Model            = PowerEdgeM1000eControlPanel
System AssetTag         = 00000
Service Tag             =
Chassis Name            = Dell Rack System
Chassis Location        = [UNDEFINED]
Power Status            = ON

Session Information

Type    User     IP Address      Login Date/Time

Sensor Information

<senType> <Num> <sensorName> <status> <reading> <units> <lc>
<uc>
FanSpeed  1  Fan-1    OK      14495  rpm  7250 14500
FanSpeed  2  Fan-2    OK      14505  rpm  7250 14500
FanSpeed  3  Fan-3    OK      4839   rpm  2344 14500
FanSpeed  4  Fan-4    OK      14527  rpm  7250 14500
FanSpeed  5  Fan-5    OK      14505  rpm  7250 14500
FanSpeed  6  Fan-6    OK      4835   rpm  2344 14500
FanSpeed  7  Fan-7    OK      14521  rpm  7250 14500
FanSpeed  8  Fan-8    Not OK  1     rpm  7250 14500
FanSpeed  9  Fan-9    OK      4826   rpm  2344 14500
<senType> <Num> <sensorName> <status> <reading> <units> <lc>
<uc>
Temp 1  Ambient_Temp    OK      21  celcius  N/A  40
PWR 1  PS-1    Online   OK
PWR 2  PS-2    Online   OK

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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, CMC may require up to two minutes to return to a usable state.

Synopsis

racadm racreset [-m <module>]

Input

(module) — sled-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
  – server-<nx> — where n=1–4 and x=a-d (lower case)

  NOTE: The values n= 2 and 4 are valid for multi-node sleds only

• -c: <feature> — Must be one of the following values:
  – ad — Reset Active Directory and LDAP 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 “disabled”.

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

  NOTE: If the racresetcfg is performed on a chassis, the CMC resets after the task.

Example

• Perform reset of configuration data to defaults for server-1 module.
  racadm racresetcfg -m server-1
remoteimage

Description
Connects, disconnects, or deploys a media file on a remote server.

To use this subcommand, you must have the Administrator permission.

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

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.
- **<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 reseat option is not available for individual FM120 servers.

**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 turned off on that server
  ```
  racadm serveraction -m server-3 powerdown
  Server is already powered OFF.
  ```
- Turn off the server from CMC when Power is already turned 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 action on multinode server:
  ```
  racadm serveraction -m server-1a powerstatus
  ```
- Get Power Status on iDRAC
  ```
  racadm serveraction powerstatus
  Server Power Status: ON
  ```
- Reseat action on a multinode sled
  ```
  racadm serveraction -f -m sled-1 reseat
  ```
- Explanation of Support
  CMC needs to support graceful shutdown
  The support of address individual blades is expected on the CMC

**set**

**Description**

Import saved CMC configuration or CMC Event Filter configuration from a file.
NOTE: If CMC is not in the network, you cannot import the chassis configuration profile from a remote network share with proxy using the `set` command. But, you can import the chassis configuration profile from the local management station.

**Synopsis**
```
racadm -r <CMC IP> -u <CMC username> -p <CMC password> set -f <filename>
```
```
racadm -r <CMC IP> -u <CMC username> -p <CMC password> set -f <filename> -t xml
```
```
racadm set -f <filename> -t xml -u <username> -p <password> -l <CIFS share>
```
```
racadm set -f <filename> -t xml -l <NFS share>
```

**Input**
- `-f`: import CMC configuration or CMC event filter from a file.
- `-u`: username of the remote share from where the file must be imported.
- `-p`: password for the remote share from where the file must be imported.
- `-l`: network share location from where the file must be imported.
- `-t`: specify the file type to be imported. The valid value is “XML”.

**Example**
- Configure event filter configurations from a configuration file using remote racadm
  ```
racadm -r 192.168.0.120 -u <username> -p <password> set -f file.txt
  ```
- Configure a CMC from an XML configuration file on a local share using remote racadm
  ```
racadm -r 192.168.0.120 -u <username> -p <password> set -f myfile.xml -t xml
  ```
- Configure a CMC from an XML configuration file on a remote CIFS share
  ```
racadm set -f myfile.xml -t xml -u myuser -p mypass -l //192.168.0.0/myshare
  ```
- Configure a CMC from an XML configuration file on a remote NFS share
  ```
racadm set -f myfile.xml -t xml -l 192.168.0.0:/myshare
  ```

**setassettag**

**Description**
Sets the N-byte ASCII asset tag for the chassis.

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

NOTE: The special characters " (double quote), ` (back quote), & (ampersand), and \\ (backslash) are not supported for this subcommand.

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

NOTE: The special characters " (double quote), ` (back quote), & (ampersand), and \ (backslash) are not supported for this subcommand.

Synopsis
racadm setchassisname <name>

NOTE: Chassis name 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 > = A1 or A2
< 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 = 1–2
  - 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 CMC 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 Chassis Administrator** permission.

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

**Synopsis**

```
• 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 or 2
• 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
• racadm setniccfg -p [-6]
• racadm setniccfg [-m <module>] -k [<speed> <duplex>]
```
racadm setniccfg [-i <slot>] -v [<vlan_id> <vlan_priority>]

**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.
- `-m<module>` — Must be one of the following values:
  - `chassis`: Default state if - m is not specified.
  - `server-n`: where n=1–4
  - `server-nx`: where n=1–4; x=a–d (lower case)
  - `switch-n`: where n=1–2
- `-i <slot>` — Must be number n, where n=1 to 4
- `-v` — When performing on a switch, release and renew any DHCP lease on that port for the changes to be effective. The VLAN settings must be one of the following legal values:
  - no arguments imply remove vlan tag, not compatible with server-nx. For example ("server-4b") notation
  - `<vlan_id>` 1 to 4000, 4021, and 4094 inclusive
  - `<vlan_priority>` 0 to 7, inclusive
- `-p` — Disables IPv4 (default)/IPv6 protocol
- `-k` — Must be one of the following legal values:
  - no arguments implies autonegotiate
  - `<speed>` = 10, 100
  - `<duplex>` = half, full
- `-r` — Enable or disable redundant mode. The legal values are:
  - 1 — Enable
  - 0 — Disable

**NOTE:** The options `-o`, `-k`, `-p`, and `-r` can be specified for chassis only.

**Example**

```
• racadm setniccfg -s 192.168.0.120 255.255.255.0 192.168.0.1
• racadm setniccfg -d
• racadm setniccfg -d6
• Configuration of speed = 100Mbps and duplex = full duplex:
  racadm setniccfg -k 100 full
• Configuration of speed and duplex to autonegotiate:
  racadm setniccfg -k
• Configuration of redundant mode:
  racadm setniccfg -r 1
```
• Configuration of VLAN id and priority of a slot or all blades in a sleeve:
  racadm setniccfg -i 5 -v 1000 7
• Configuration of CMC to a static IPv6 address:
  racadm setniccfg -m chassis -s -6 2001:DB8::2 64 2001:DB8::1
• Configuration of server to use stateless autoconfiguration address:
  racadm setniccfg -m server-1 -d -6
• Configuration of VLAN id and priority for a switch:
  racadm setniccfg -m switch-1 -v 1000 7
• Removal of VLAN configuration from a switch:
  racadm setniccfg -m switch-1 -v no

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 in the string yyyymmddhhmmss.mmmmmmsoff where:
    — 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 ‘*’.

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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 yyyyymmddhhmmss 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 slot and enables the feature to display the host name (if available) or iDRAC DNS name of all the four slots, or of a specified slot (indicated by the slot number) in the chassis. Optionally, use this command to set whether the 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 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.
- The special characters " (double quote), ` (back quote), & (ampersand), and \ (backslash) are not supported for this subcommand.

Synopsis

```
racadm setslotname [-i <slotNum> <slotname> | -h 0|1|2]
racadm setslotname -h <value>
```

Input

- -i <slotNum> — Specify the slot number in the chassis. Valid values: 1 to 4.
- <slotname> — The new name to be assigned to the slot.
- -h <values> — Displays the Hostname, Slotname, or iDRAC DNS name. The legal values are:
  - 0 — Displays the Slotname
  - 1 — Displays the Hostname
  - 2 — Displays the iDRAC DNS name

Example

- Set the name of slot 3 as server3:
  
  ```
racadm setslotname -i 3 server3
  ```
setsysinfo

Description
Sets the name or location of the chassis.

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

**NOTE:** The special characters “ (double quote), ` (back quote), &(ampersand), and \ (backslash) are not supported for this subcommand.

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 four different SSH public keys per user. You can upload a key file or key text, view keys, or delete keys.

RSA key size should be between 768 and 4096 and the recommended DSA key size is 1024.

This command has three mutually exclusive modes—upload, view, and delete that are determined by the options.

Upload

The upload mode allows you to upload a keyfile or to copy the key text on the command line. You cannot upload and copy a key at the same time.

Remote RACADM:

```
racadm sshpkauth -i <2 to 16> -k <1 to 4> -f <filename>
```

```
racadm sshpkauth -i <2 to 16> -k <1 to 4> -t <key-text>
```

Telnet/ssh/serial RACADM:

```
racadm sshpkauth -i <2 to 16> -k <1 to 4> -t <key-text>
```
View
The view mode allows the user to view a key specified by the user or all keys.

```
racadm sshpkauth -i <2 to 16> -v -k <1 to 4>
racadm sshpkauth -i <2 to 16> -v -k all
```

Delete
The delete mode allows the user to delete a key specified by the user or all keys.

```
racadm sshpkauth -i <2 to 16> -d -k <1 to 4>
racadm sshpkauth -i <2 to 16> -d -k all
```

Synopsis
```
racadm sshpkauth
```

**NOTE:**
For DSA keys greater than 2048, use the following racadm command. CMC accepts RSA keys up to key strength 4096, but the recommended key strength is 1024.

```
racadm -r 192.168.8.14 -u root -p <default root user password> sshpkauth -i svcacct -k 1 -p 0xfff -f dsa_2048.pub
```

Input
- `-i <user index>` - Index for the user. `<user index>` must be between 2 and 16 on iDRAC.
- `-k [key index] | all` - Index to assign the PK key being uploaded, all only works with the `-v` or `-d` options. `<key index>` must be between 1 and 4 or `all` on iDRAC.
- `-t <PK Key Text>` - Key text for the SSH Public key.
- `-f <filename>` - File containing the key text to upload. The `-f` option is not supported on Telnet/ssh/serial RACADM.
- `-v` - View the key text for the index provided.
- `-d` - Delete the key for the index provided.

Examples:
- Upload an invalid key to iDRAC User 2 in the first key space using a string:
  ```
  $ racadm sshpkauth -i 2 -k 1 -t "This is invalid key Text"
  ERROR: Key text appears to be corrupt
  ```
- Upload a valid key to iDRAC User 2 in the first key space using a file:
  ```
  $ racadm sshpkauth -i 2 -k 1 -f pkkey.key
  Key file successfully uploaded.
  ```
- Get all keys for User 2 on iDRAC:
  ```
  $ racadm sshpkauth -v -i 2 -k all
  *********************** User ID 2 ***********************
  Key ID 1:
  ssh-rsa AAAAB3NzaC1yc2EAAAABIwAAAIAEazzy+k2npnKgVEXGXIzo0sbR6JgA5YNbWs3ekoxXV
  fe3y7VpVc/5zrrr7XrwKb3AEJTqSw85d3iR4n3v1ap1PHm1V5Mn55Ea6LHUlAXFqXmOdlThd
  wi1U2Vlw/iRH12ymUFnut8ggbPQqqV2L8bsUaMqb5PooIV6hy4isCNJU=
  1024-bit RSA, converted from OpenSSH by xx_xx@xx.xx
  ```
- Key ID 2:
- Key ID 3:
- Key ID 4:
sslkeyupload

Description
Uploads SSL key from the client to CMC.

To use this subcommand, you must have Server Administrator permission.

Synopsis
`racadm sslkeyupload -t <type> -f <filename>`

Input
- `-t` — Specifies the key to upload.
  - 1 = SSL key used to generate the server certificate
- `-f` — Specifies the file name of the SSL key to be uploaded.

Output
Returns 0 when successful and a nonzero number when unsuccessful.

Example
`racadm sslkeyupload -t 1 -f c:\sslkey.txt`

sslcertupload

Description
Uploads a custom SSL server or CA certificate for Directory Service from the client to CMC.

To use this subcommand, you must have the Server Administrator 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.
  - 1 = server certificate.
  - 2 = CA certificate for Directory Service
- `-f` — Specifies the file name of the certificate to be uploaded.
- `-e` — Allows for upload of multiple certificate format types.
  - 1 = Base64
  - 2 = PKCS12

The current release does not support this option.
- `-p` — Pin for decrypting the PKCS12 file uploaded.
  - If `<format type>` is selected as 2, it is mandatory to specify `-p` option.
  - The current release does not support this option.

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 CMC.

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

Synopsis
`racadm sslcertview -t <type> [-A]`
Input

- \(-t\) — Specifies the type of certificate to view, either the CA certificate or server certificate.
  - \(-1\) = server certificate
  - \(-2\) = CA certificate for Directory Service.
- \(-A\) — Prevents printing of headers or labels.

Output

```
racadm sslcertview -t 1
```

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>00</th>
</tr>
</thead>
</table>

**Subject Information:**

<table>
<thead>
<tr>
<th>Country Code (CC)</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>State (S)</td>
<td>Texas</td>
</tr>
<tr>
<td>Locality (L)</td>
<td>Round Rock</td>
</tr>
<tr>
<td>Organization (O)</td>
<td>Dell Inc.</td>
</tr>
<tr>
<td>Organizational Unit (OU)</td>
<td>Remote Access Group</td>
</tr>
<tr>
<td>Common Name (CN)</td>
<td>CMC Default certificate</td>
</tr>
</tbody>
</table>

**Issuer Information:**

<table>
<thead>
<tr>
<th>Country Code (CC)</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>State (S)</td>
<td>Texas</td>
</tr>
<tr>
<td>Locality (L)</td>
<td>Round Rock</td>
</tr>
<tr>
<td>Organization (O)</td>
<td>Dell Inc.</td>
</tr>
<tr>
<td>Organizational Unit (OU)</td>
<td>Remote Access Group</td>
</tr>
<tr>
<td>Common Name (CN)</td>
<td>CMC Default certificate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Valid From</th>
<th>Jul 8 16:21:56 2005 GMT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid To</td>
<td>Jul 7 16:21:56 2010 GMT</td>
</tr>
</tbody>
</table>
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 CMC.

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

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`
- `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.

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

Synopsis
racadm sslresetcfg

Example
$ racadm sslresetcfg
Certificate generated successfully and webserver restarted.

testemail

Description
Sends a test e-mail from CMC 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
Failure: Unable to send test e-mail

Example
Commands for the cfgEmailAlert group:
• Enable the alert —
  racadm config -g cfgEmailAlert -o cfgEmailAlertEnable -i 1
• Set the destination e-mail address —
  racadm config -g cfgEmailAlert -o cfgEmailAlertAddress -i 1 user1@mycompany.com
• Set the custom message that is sent to the destination e-mail address —
  racadm config -g cfgEmailAlert -o cfgEmailAlertCustomMsg -i 1 "This is a test!"
• Make sure that the SMTP IP address is configured properly —
  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:
  - ad — Tests Active Directory configuration using simple authentication (user name and password).
  - adkrb — Tests Active Directory configuration using the Kerberos authentication.
  - 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.

**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.

This subcommand when executed performs the following:
- Checks command syntax.
- Verifies whether the required system resources are available.
- Validates Active Directory configuration.
- Verifies the SSL certificate and if the certificate signing request (key) exists.
- Acquires LDAP and Global Catalog Service records from DNS.
- 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 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> [-d <diagnostic-message-level>]
```

### testtrap

**Description**
Tests the RAC’s SNMP trap alerting feature by sending a test trap from CMC to a specified destination trap listener on the network.

To use this subcommand, you must have the Test Alerts permission.

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** permission.

**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** permission.

**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
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: 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)

<table>
<thead>
<tr>
<th>Description</th>
<th>A text string that identifies the product.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>A string of up to 63 ASCII characters.</td>
</tr>
<tr>
<td>Default for iDRAC</td>
<td>Integrated Dell Remote Access Controller.</td>
</tr>
<tr>
<td>Default for CMC</td>
<td>Chassis Management Controller.</td>
</tr>
</tbody>
</table>

idRacDescriptionInfo (Read Only)

<table>
<thead>
<tr>
<th>Description</th>
<th>A text description of the RAC type.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>A string of up to 255 ASCII characters.</td>
</tr>
<tr>
<td>Default</td>
<td>This system component provides a complete set of remote management functions for Dell PowerEdge servers.</td>
</tr>
</tbody>
</table>
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 CMC NIC for IPv4.

One instance of the group is allowed. Some objects in this group may require CMC NIC to be reset, which may cause a brief loss in connectivity. Objects that change CMC NIC IP address settings close all active user sessions and require users to reconnect using the updated IP address settings.

For CMC, 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 a setting that does not have a hash sign (#) prefixed 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)
- 0 (FALSE)

**Default**
- For iDRAC: 0
- For CMC: 1
**cfgNicVLanEnable (Read or Write)**

**Description**
Enables or disables the VLAN capabilities.

All chassis management traffic, including the CMC and all iDRACs, resides on this external VLAN when enabled. No iDRAC configuration change is required to use this external management network VLAN.

**Legal Values**
- 1 (TRUE)
- 0 (FALSE)

**Default**
0

**Example**
- racadm config -g cfgLanNetworking -o cfgNicVLanEnable 1
- racadm config -g cfgLanNetworking -o cfgNicVLanEnable 0

**cfgNicVLanId (Read or Write)**

**Description**
Specifies the VLAN ID for the network VLAN configuration in CMC. 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

**cfgNicVLanPriority (Read or Write)**

**Description**
Specifies the VLAN Priority for the network VLAN configuration in CMC. This property is only valid if cfgNicVLanEnable is set to 1 (enabled).

**Legal Values**
0 – 7

**Default**
0

**Example**
racadm config -g cfgLanNetworking -o cfgNicVLanPriority 7

**cfgDNSDomainNameFromDHCP (Read/Write)**

**Description**
Specifies that the DNS domain name should be assigned from the network DHCP server.

**Legal Values**
- 1 (TRUE)
- 0 (FALSE)

**Default**
0

This property is used only if cfgNicUseDhcp is set to 1 (true), or if both **cfgCurrentIPv6Enabled** 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
• cfgCurrentIPv6Enabled
• 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 or Write)**

**Description**
In the DNS domain name, parameter is only valid 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 '.

**NOTE:** Microsoft Active Directory only supports 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.

**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)
• 0 (FALSE)

**Default**
0

**NOTE:** For IPv6, only the DHCPv6 address or static address is registered.
Example:

```bash
racadm getconfig -g cfgLanNetworking
cfgNicEnable=1
cfgNicIPv4Enable=1
cfgNicIpAddress=192.168.0.120
cfgNicNetmask=255.255.255.0
cfgNicGateway=192.168.0.1
cfgNicUseDhcp=1
# cfgNicMacAddress=00:00:00:00:00:01
cfgNicVLanEnable=0
cfgNicVLanID=1
cfgNicVLanPriority=0
cfgDNSServersFromDHCP=1
cfgDNSServer1=192.168.0.5
cfgDNSServer2=192.168.0.6
cfgDNSRacName=cmc-frankly
cfgDNSDomainName=fwad.lab
cfgDNSDomainNameFromDHCP=1
cfgDNSRegisterRac=1
```

### cfgDNSServersFromDHCP (Read/Write)

**Description**

Specifies if the DNS server IPv4 addresses should be assigned from the DHCP server on the network.

For CMC, this property is used only if `cfgNicUseDhcp` is set to 1 (true).

**Legal Values**

- 1 (TRUE)
- 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).

**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).

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)
• 0 (FALSE)

Default
1

cfgNicIpAddress (Read/Write)

Description
Specifies the static IPv4 address to be assigned to the RAC or CMC.

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. This property is only valid if cfgNicUseDhcp is set to 0 (FALSE).

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. 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).
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

**cfgNicUseDhcp (Read or Write)**

**Description**

Specifies whether DHCP is used to assign the CMC IPv4 address. If this property is set to 1 (TRUE), then CMC IPv4 address, subnet mask and gateway are assigned from the DHCP server on the network. If this property is set to 0 (FALSE), the user can configure the cfgNicIpAddress, cfgNicNetmask and cfgNicGateway properties.

**Legal Values**

- 1 (TRUE)
- 0 (FALSE)

**Default**

0

**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.

**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 User Configuration Administrator privilege.

The following sections provide information about the objects in the cfgUserAdmin group.

**cfgUserAdminIndex (Read Only)**

**Description**

The unique index of a user.
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**
<i 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**
0x00000000-0x0000fff, 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 privileges.

<table>
<thead>
<tr>
<th>iDRAC Specific User Privilege</th>
<th>Privilege Bit Mask</th>
</tr>
</thead>
<tbody>
<tr>
<td>Login to iDRAC</td>
<td>0x00000001</td>
</tr>
<tr>
<td>Configure iDRAC</td>
<td>0x00000002</td>
</tr>
<tr>
<td>Configure Users</td>
<td>0x00000004</td>
</tr>
<tr>
<td>Clear Logs</td>
<td>0x00000008</td>
</tr>
<tr>
<td>Execute Server Control Commands</td>
<td>0x00000010</td>
</tr>
<tr>
<td>Access Virtual Console</td>
<td>0x00000020</td>
</tr>
<tr>
<td>Access Virtual Media</td>
<td>0x00000040</td>
</tr>
<tr>
<td>Test Alerts</td>
<td>0x00000080</td>
</tr>
<tr>
<td>Execute Debug Commands</td>
<td>0x00000100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CMC Specific User Privilege</th>
<th>Privilege Bit Mask</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMC Login User</td>
<td>0x00000001</td>
</tr>
<tr>
<td>Chassis Configuration Administrator</td>
<td>0x00000002</td>
</tr>
<tr>
<td>User Configuration Administrator</td>
<td>0x00000004</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>User Privilege(s)</th>
<th>Privilege Bit Mask</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user is not allowed to access CMC.</td>
<td>0x00000000</td>
</tr>
<tr>
<td>The user may only log in to CMC and view CMC and server configuration information.</td>
<td>0x00000001</td>
</tr>
<tr>
<td>The user may log in to CMC and change configuration.</td>
<td>0x00000001 + 0x00000002 = 0x00000003</td>
</tr>
<tr>
<td>The user may log in, access Virtual Media, and Virtual Console.</td>
<td>0x00000001 + 0x00000040 + 0x00000080 = 0x000000C1</td>
</tr>
</tbody>
</table>

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), \ (backward slash), . (period), @ (at symbol), " (quotation marks), (semicolon), or ' (backward quote)

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.
cfgUserAdminEnable (Read/Write)

Description: Enables or disables an individual user.

NOTE: You can enable a user for a given index, only if you set the password for the same user.

Legal Values:
- 1 (TRUE)
- 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 for, you must have Chassis Configuration Administrator privileges.

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)
- 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 or iDRAC. 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 sessions, the session closes.

Legal Values
0, 10 – 1920

Default
iDRAC - 60
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.

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.

### 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)
- 0 (FALSE)

**Default**

1

### cfgSerialConsoleQuitKey (Read or Write)

**Description**

This key or key combination terminates the Virtual Console text for CMC.

**Legal value:** String of up to 2 characters

This key specifies the character that ends the serial text console connect (or `racadm connect`) command.

- **NOTE:** The CTRL key is represented by using the ^ (carat) character.
- **NOTE:** The CTRL key does not generate a character by itself, but must be struck simultaneously with another key to generate a character.

For example, striking both the CTRL key and the \ key simultaneously (rather than sequentially) is denoted as `^ \`.

Configuration options: The value must start with the ^ character, and must follow one of the characters — a-z, A-Z, [,], \.

In the input command, use \ without the quotes. For example:

```shell
config -g cfgSerial -o cfgSerialConsoleQuitKey "SHIFT+6\"
```

**Default:**

`^\`

- **NOTE:** For more information about running the RACADM commands for special characters, see [Guidelines to Quote Strings Containing Special Characters](#).
cfgSerialConsoleIdleTimeout (Read/Write)

Description
The maximum number of seconds to wait before an idle serial session is disconnected.

Legal Values
- 0 = No timeout
- 60 – 1920

Default
1800

cfgSerialConsoleNoAuth (Read/Write)

Description
Enables or disables the RAC or CMC serial console login authentication.

Legal Values
- 0 (enables serial login authentication)
- 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.

NOTE: The prompt counts as two characters.

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)
- 0 (FALSE)

Legal Values
1

cfgSerialTelnetEnable (Read/Write)

Description
Enables or disables the Telnet console interface on CMC.

Legal Values
- 1 (TRUE)
- 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.

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)
- 0 (FALSE)
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.

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)
• 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.

Use the -m option to apply this setting to iDRAC.

The following sections provide information about the objects in the cfgRacTuning group.

cfgRacTuneDefCredentialWarningEnable

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) or 0 (FALSE)

Default: 1

cfgRacTuneChassisMgmtAtServer

Description: Modify the Rack System Management Mode

Legal Values:
- 0 — Disable
- 1 — Monitor
- 2 — Manage and Monitor

Default: 2

cfgRacTuneHttpPort (Read/Write)

Description: Specifies the port number to use for HTTP network communication with.

Legal Values: 10–65535

NOTE: The following port numbers are reserved and cannot be used: 21, 68, 69, 111, 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, 111, 123, 161, 546, 801, 4003, 4096, 5988, 5989, 6900, 9000, 60106.

Default 443

cfgRacTunIpRangeEnable (Read/Write)

Description  Enables or disables the IPv4 Address Range validation feature.

Legal Values

- 1 (TRUE)
- 0 (FALSE)

Default 0

cfgRacTunIpRangeAddr (Read/Write)

Description  Specifies the acceptable IPv4 address bit pattern in positions determined by the 1s in the range mask property (cfgRacTunIpRangeMask).

A login from the incoming IP address is allowed only if both of the following are identical:

- cfgRacTunIpRangeMask bit-wise and with incoming IP address
- cfgRacTunIpRangeMask bit-wise and with cfgRacTunIpRangeAddr.

Legal Values  An IPv4 address formatted string, for example, 192.168.0.44.

Default 192.168.1.1

cfgRacTunIpRangeMask (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:

- cfgRacTunIpRangeMask bit-wise and with incoming IP address
- cfgRacTunIpRangeMask bit-wise and with cfgRacTunIpRangeAddr.

Legal Values  An IPv4 address formatted string, for example, 255.255.255.0.

Default 255.255.255.0

cfgRacTunIpBlkEnable (Read/Write)

Description  Enables or disables the IPv4 address blocking feature.

Legal Values

- 1 (TRUE)
- 0 (FALSE)
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

NOTE: The following port numbers are reserved and cannot be used: 21, 68, 69, 111, 123, 161, 546, 801, 4096, 5988, 5989, 6900, 9000, 60106.

Default: 22

cfgRacTuneTelnetPort (Read/Write)

Description: Specifies the port number used for iDRAC or CMC Telnet interface.

NOTE: For CMC, the following port numbers are reserved and cannot be used: 21, 68, 69, 111, 123, 161, 546, 801, 4096, 5988, 5989, 6900, 9000, 60106.

Legal Values:
- For CMC: 10 – 65535
- For iDRAC: 1 – 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**

```bash
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

**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:

- - 480 (PST — Pacific Standard Time)
- - 420 (MST — Mountain Standard Time)
- - 360 (CST — Central Standard Time)
- - 480 (PST — 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 – 7800

**Default**
0

**cfgRacTuneSledNetworkUplink**

**Description**
Configuration of all the sleds that contain an internal network switch (for example, the FM120).

**Legal Values**
- 1 - Standard (aggregated)
- 2 - Network Adaptor Isolation (Enhanced Security)
3 - Isolated Networks

Default

1

cfgRacTuneUserBlkEnable

Description
Blocks the login for maximum of 5 minutes after 5 unsuccessful login attempts. The login using any interface such as WSMAN or GUI is blocked after 5 unsuccessful attempts.

NOTE: This is applicable only to configure the user privilege.

Legal Values
- 1 – Enabled
- 0 – Disabled

Default
0 — Disabled

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
```

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)
- 0 (FALSE)

Default
1

cfgServerInfo

For CMC, this group allows you to displays information for and configure a server in the chassis.

For iDRAC this group allows you to select the BIOS first boot device and provides the option to boot the selected device only once.

Use this object with the config or getconfig subcommands.
To use this object property for CMC, you must have **Chassis Configuration Administrator** privilege.

The following sections provide information about the objects in the `cfgServerInfo` group.

**cfgServerInfoIndex (Read Only)**

**Description**
Displays the index name of the server.

**cfgServerSlotNumber (Read Only)**

**Description**
Specifies the location of the specified server (1–4) in the chassis.

**cfgServerServiceTag (Read Only)**

**Description**
Displays the service tag of the specified server.

**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 CMC management firmware revision.

**cfgServerBIOS (Read Only)**

**Description**
Displays the server's BIOS revision.

**cfgServerBmcMacAddress (Read Only)**

**Description**
Displays the BMC MAC address of the specified server.

**cfgServerNic1MacAddress (Read Only)**

**Description**
Displays the MAC address of the server NIC 1.

**cfgServerNic2MacAddress (Read Only)**

**Description**
Displays the MAC address of the server NIC 2.

**cfgServerNic3MacAddress (Read Only)**

**Description**
Displays the MAC address of the server NIC 3.
cfgServerNic4MacAddress (Read Only)

Description
Displays the MAC address of the server NIC 4.

cfgServerNicEnable (Read/Write)

Description
Enables or disables LAN channel.

Legal Values
- 1 (Enable)
- 0 (Disable)

cfgServerNodeId

Description
Unique identification for a server provided by Dell for support and maintenance.

cfgServerIPMIOverLanEnable (Read/Write)

Description
Enables or disables IPMI LAN channel.

Legal Values
- 1 (enable)
- 0 (disable)

cfgServerDNSRegisterIMC (Read/Write)

Description
Enables or disables DNS name registration for the CMC.

Legal Values
- 1 (enable)
- 0 (disable)

cfgServerDNSIMCName (Read/Write)

Description
Displays the DNS domain name for the CMC.

cfgServerRootPassword (Write Only)

Description
Displays the password for CMC as a series of asterisks (*). It cannot be seen or displayed after this property is written.

cfgServerFirstBootDevice (Read/Write)

Description
Sets or displays the first boot device.

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 = None
- 0 = Default
- 4 = PXE
- 8 = HDD
- 20 = CD-DVD
- 24 = BIOS
- 28 = vFDD
- 32 = vCD-DVD
- 40 = SD
- 44 = RFS
- 48 = F11
- 52 = F10
- 60 = FDD

Default 0 = None

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

cfgStorageModule

This group contains the parameters to configure storage sleds.

Use this command with the config and getconfig commands.

To use this object property, you must have the Chassis Configuration Administrator privilege.

The following sections provide information about the objects in the cfgStorageModule group.

cfgStorageModuleStorageMode (Read/Write)

Description Displays the configuration mode of the storage sled.

Legal Values
- 2 — Split-single
- 1 — Split-dual
- 0 — Joined
cfgStorageModuleServiceTag (Read Only)

Description Displays the Service Tag of the storage sled.

Legal Values Any printable string of up to seven alpha-numeric characters, without white space.

cfgStorageModuleAssetTag (Read/Write)

Description Displays the Asset Tag of the storage sled.

Legal Values Any printable alpha-numeric string of up to 254 characters, without white space.

ConnectedServer (Read Only)

Description Displays the name of the compute sled to which storage sled is connected.

Legal Values None

Default Value None

RAID-EnabledControllers (Read Only)

Description Displays the name of the RAID-enabled controller. This property is updated when the single RAID or dual RAID license is applied.

Legal Values None

Default Values None

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.

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)
- 0 (FALSE)

Default: 1

cfgADRacDomain (Read or 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: <blank>

cfgADRootDomain

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.

If this property is disabled, LDAP authentication may be used for user login.

Legal Values:
- 1 (TRUE)
- 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.

NOTE: To modify this property, you must have the Configure CMC permission.

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)
- 0 (Disable)

**Default**
0

**cfgADSSOEnable (Read/Write)**

**Description**
Enables or disables Active Directory single sign-on authentication on CMC.

**Legal Values**
- 1 (TRUE)
- 0 (FALSE)

**Default**
0

**cfgADDomainController**

**Description**
Specifies the AD server from which you want the CMC to obtain user names. Must be used with **cfgADSpecifyServerEnable**.

**Legal Values**
Valid IP address or fully qualified domain name (FQDN).

**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).

**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).

**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).
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).

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).

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).

cfgADType (Read/Write)
Description Determines the schema type to use with Active Directory.
Legal Values
- 1 (Enables Active Directory with the extended schema)
- 2 (Enables Active Directory with the standard schema)
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

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 \texttt{cfgAdDomainController1}, \texttt{cfgAdDomainController2}, and \texttt{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
- 0 (FALSE)—use pre-configured domain controllers

**Default**

0

\textbf{cfgADSpecifyServerEnable}

\textbf{Description}  Allows you to enable or disable and specify an LDAP server or a global catalog server. Use \texttt{cfgADDomainController} or \texttt{cfgADGlobalCatalog} to specify the IP address.

**Legal Values**

- 1 (enabled)
- 0 (disabled)

**Default**

0

\textbf{cfgLDAP}

This group allows you to configure settings related to the Lightweight Directory Access Protocol (LDAP).

Use this object with the \texttt{config} or \texttt{getconfig} subcommands.

To use this object property for CMC, you must have the \textit{Chassis Configuration Administrator} privilege.

The following sections provide information about the objects in the \texttt{cfgLDAP} group.

\textbf{cfgLdapEnable (Read/Write)}

\textbf{Description}  Turns LDAP service on or off.

If this property is disabled, local CMC authentication is used for user logins.

\textbf{NOTE: For CMC, enabling this option turns off cfgADEnable.}

**Legal Values**

- 1 (TRUE)— Enable
- 0 (FALSE)— Disable

**Default**

0

\textbf{cfgLdapServer (Read/Write)}

\textbf{Description}  Configures the address of the LDAP Server. IPv4 and IPv6 are supported.

\textbf{NOTE: You can specify multiple servers by separating each server with a comma. For example, example.com, sub1.example.com}

**Legal Values**

String.

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

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
- 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.

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=*)

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.
- 0 (FALSE)—CMC does not perform the 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)
- 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.

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
2U

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.

The following sections provide information about the objects in the cfgStandardSchema group.

cfgSSADRoleGroupId (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
```

# cfgSSADRoleGroupIndex=1
cfgSSADRoleGroupName=blsys-1
cfgSSADRoleGroupDomain=
cfgSSADRoleGroupPrivilege=3081

The following table displays the bit masks for Role Group privileges:

<table>
<thead>
<tr>
<th>Role Group Privilege</th>
<th>Bit Mask</th>
</tr>
</thead>
<tbody>
<tr>
<td>Login to iDRAC</td>
<td>0x00000001</td>
</tr>
<tr>
<td>Configure iDRAC</td>
<td>0x00000002</td>
</tr>
<tr>
<td>Configure Users</td>
<td>0x00000004</td>
</tr>
<tr>
<td>Clear Logs</td>
<td>0x00000008</td>
</tr>
<tr>
<td>Execute Server Control Commands</td>
<td>0x00000010</td>
</tr>
<tr>
<td>Access Virtual Console</td>
<td>0x00000020</td>
</tr>
<tr>
<td>Access Virtual Media</td>
<td>0x00000040</td>
</tr>
<tr>
<td>Test Alerts</td>
<td>0x00000080</td>
</tr>
<tr>
<td>Execute Debug Commands</td>
<td>0x00000100</td>
</tr>
</tbody>
</table>

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.

The following sections provide information about the objects in the **cfgChassisPower** group.

> NOTE: While configuring chassis power from a file, update the value for one chassis power cap property and remove the values for the other chassis power cap properties or, update the last percentage value as it is applicable to all chassis power cap properties. The chassis power cap properties are: **cfgChassisPowerCap**, **cfgChassisPowerCapF**, **cfgChassisPowerCapBTU**, **cfgChassisPowerCapFBTU**, **cfgChassisPowerCapPercent**, and **cfgChassisPowerCapFPercent**.

### cfgChassisInPower (Read Only)

**Description**
Indicates the cumulative input power consumption data (in Watts and BTU/hr) captured from all healthy and functional PSUs in the chassis.

**Legal Values**
None

**Default**
None

### cfgChassisPeakPower (Read Only)

**Description**
The maximum system input power consumption (in Watts), because the value was last cleared by a user.

**Legal Values**
None

**Default**
None

### 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 Watts) 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
The document contains a table describing different configuration settings related to chassis power status, redundancy state, and power conservation modes.

### cfgChassisPowerStatus (Read Only)
- **Description**: Indicates the power status of the chassis.
- **Legal Values**:
  - 1 (other)
  - 2 (unknown)
  - 3 (OK)
  - 4 (non-critical)
  - 5 (critical)
  - 6 (non-recoverable)
- **Default**: None

### cfgChassisRedundantState (Read Only)
- **Description**: Indicates the power supply redundancy status.
- **Legal Values**:
  - 0 (none)
  - 1 (full)
- **Default**: None

### cfgChassisMaxPowerConservationMode (Read/Write)
- **Description**: Enables or disables maximum power conservation mode. When enabled, all servers are immediately reduced to their minimum power levels, and all subsequent server power allocation requests are denied. In this mode, performance of the servers that are turned on may be degraded, and additional servers cannot be turned on, regardless of the server priority.
- **Legal Values**:
  - 0 (disabled)
  - 1 (enabled)
- **Default**: 0 (disabled)

### cfgChassisPowerCapUpperBound (Read Only)
- **Description**: Indicates the minimum chassis thermal capacity, power supply capacity, and server maximum input.
- **Default**

### cfgChassisPowerCapLowerBound (Read Only)
- **Description**: Indicates the minimum power required to operate the chassis with the servers running.
- **Default**
**cfgChassisSledPowerButtonEnable**

**Description**
Permits to use the power button on all multi-node Sleds (such as the FM120).

**Legal Values**
- 1 — Enable
- 0 — Disable

**Default**
1

**cfgChassisPowerCap (Read/Write)**

**Description**
Indicates the maximum power consumption limit (in Watts) 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**
539 – 3371 Watts

**Default**
3371 Watts

**cfgChassisPowerCapF (Read/Write)**

**Description**
Indicates the maximum power consumption limit (in Watts) 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**
539 – 3371 Watts

**Default**
3371 Watts

**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**
1839-11501 BTU/hr

**Default**
11501 BTU/hr

**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

NOTE: If the specified percent is lower than the minimum value, the CMC will set the value to the minimum value.

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

NOTE: If the specified percent is lower than the minimum value, the CMC will set the value to the minimum value.

Default
100

cfgChassisRedundancyPolicy (Read/Write)

Description
Sets the redundancy policy of the chassis.

Legal Values
• 0 (no redundancy)
• 1 (Grid redundancy)
• 3 (Redundancy Alerting Only)

Default
3 (Redundancy Alerting Only)

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 Watts) 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)
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)
• 1 (enabled)

Default: None

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.

cfgKvmEnable

Description: Enable KVM operation for all slots

Legal Values:
• 0 — Disable
• 1 — Enable

Default
1

cfgKvmMapping

Description
Selects the server to which the KVM connects
Legal Values
[a-d]-[a-d]
Default
0 (Unmapped)

cfgAlerting

This group enables or disables SNMP event trap alerting and sets the event filter.

Use this object with the config or getconfig subcommands.

cfgAlertingEnable

Description
Enables or disables event traps on the CMC.
Legal Values
• 1 (true)
• 0 (false)
Default
None

To use this object property, you must have the Chassis Configuration Administrator privilege.

cfgAlertingSourceEmailName

Description
Specifies the e-mail address used to send e-mail notifications when an event occurs.
Legal Values
None
Default
None

Examples

```
racadm getconfig -g cfgAlerting -o cfgAlertingSourceEmailName
```

```
racadm config -g cfgAlerting -o cfgAlertingSourceEmailName user@home.com
```

Object value modified successfully.

To use this object property, you must have Chassis Configuration Administrator and Test Alert User privileges.

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 Chassis Configuration Administrator privilege.

NOTE: To apply this setting to iDRAC, use the -m option.

The following sections provide information about the objects in the cfgIPv6LanNetworking group.

cfgIPv6Enable (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Enables or disables CMC IPv6 stack.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>1 (TRUE)</td>
</tr>
<tr>
<td></td>
<td>0 (FALSE)</td>
</tr>
<tr>
<td>Default</td>
<td>0</td>
</tr>
</tbody>
</table>

cfgIPv6AutoConfig (Read/Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Enables or disables the IPv6 Auto Configuration option.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>NOTE: The CMC uses its MAC address for its DUID (DUID-LL) when communicating with a DHCPv6 server.</td>
<td></td>
</tr>
<tr>
<td>Legal Values</td>
<td>1 (TRUE)</td>
</tr>
<tr>
<td></td>
<td>0 (FALSE)</td>
</tr>
<tr>
<td>Default</td>
<td>1</td>
</tr>
</tbody>
</table>

cfgIPv6Address

<table>
<thead>
<tr>
<th>Description</th>
<th>Assigns a static IPv6 address to the CMC. This property is used only if cfgIPv6AutoConfig is set to 0 (false).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>A string representing a valid IPv6 address. For example, 2001:DB8:1234:5678:9ABC:DE11:C00C:BEEF</td>
</tr>
<tr>
<td>Default</td>
<td>::</td>
</tr>
</tbody>
</table>

cfgIPv6PrefixLength (Read/Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Specifies the prefix length for IPv6 address.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOTE: This property is used only if cfgIPv6AutoConfig is set to 0 (false)</td>
<td></td>
</tr>
<tr>
<td>Legal Values</td>
<td>0–128</td>
</tr>
<tr>
<td>Default</td>
<td>64</td>
</tr>
</tbody>
</table>
cfgIPv6Gateway (Read/Write)
Description: CMC gateway IPv6 address.

NOTE: This property is used only if cfgIPv6AutoConfig is set to 0 (false.)

Legal Values: Specifies string representing a valid IPv6 entry.

Default: ::

cfgCurrentIPv6DNSServersFromDHCP6
Description: Indicates whether the DNS server addresses are assigned from the DHCPv6 server.

cfgIPv6DNSServer1 (Read/Write)
Description: Specifies the IPv6 DNS server address.

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.

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
cfgCurrentIPv6Enabled=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
```

**cfgNicCurrentIpAddress**

**Description**

Displays the IP address the CMC is currently using.

**Legal Values**

Valid IPv4 addresses. For example: 192.168.0.20.

**cfgNicCurrentNetmask**

**Description**

Displays the subnet mask the CMC is currently using.

**Legal Values**

Valid IPv4 addresses. For example: 192.168.0.20.

**cfgNicCurrentGateway**

**Description**

Displays the Gateway address the CMC is currently using.

**Legal Values**

Valid IPv4 addresses. For example: 192.168.0.20.

**cfgNicCurrentDhcpWasUsed**

**Description**

Indicates whether DHCP is used to configure the NIC.

**Legal Values**

0 – address is static.
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
1- VLAN is enabled

cfgNicCurrentVlanID (Read Only)
Description Indicates the Current Virtual Lan ID
Legal Values Integer

cfgNicCurrentVlanPriority (Read Only)
Description Indicates the Current Virtual Lan Priority.
Legal Values Integer

cfgDNSCurrentServer1
Description Displays the IP address for DNS server 1.
Legal Values A Valid IPv4 DNS IP

cfgDNSCurrentServer2
Description Displays the IP address for DNS server 2.

cfgDNSCurrentDomainName
Description Displays the DNS domain name.

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.

Example
racadm getconfig -g cfgCurrentLanNetworking
# cfgNicCurrentIPv4Enabled=1
# cfgNicCurrentIpAddress=192.68.152.116
# cfgNicCurrentNetmask=255.255.255.0
# cfgNicCurrentGateway=192.68.152.1
# cfgNicCurrentDhcpWasUsed=0
# cfgNicCurrentVlanEnable=0
# cfgNicCurrentVlanID=1
# cfgNicCurrentVlanPriority=0
# cfgDNSCurrentServer1=192.168.0.5
# cfgCurrentIPv6DNSServer2=192.168.0.6
# cfgDNSCurrentDomainName=MYDOMAIN

cfgCurrentIPv6LanNetworking (Read Only)
This group displays the current CMC IPv6 properties.
This group is applicable only for CMC. Use this object with the `getconfig` subcommand.

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

**cfgCurrentIPv6Enabled (Read/Write)**

**Description**
Enables or disables the IPv6 stack.

**Legal Values**
- 1 (TRUE)
- 0 (FALSE)

**Default**
0

**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)
- 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.

**cfgCurrentIPv6Address**

**Description**
Displays the current IPv6 addresses. This property displays up to 15 global IPv6 addresses, including stateful and stateless addresses.

**cfgCurrentIPv6Gateway**

**Description**
Displays the current IPv6 gateway.

**cfgCurrentIPv6DNSServersFromDHCP6**

**Description**
Indicates whether the DNS server addresses are assigned from the DHCPv6 server.

**cfgCurrentIPv6DNSServer1**

**Description**
Displays the IPv6 address for DNS server 1.

**cfgCurrentIPv6DNSServer2**

**Description**
Displays the IPv6 address for DNS server 2.
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

### 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
- 1 = Auto Negotiation is Enabled

**Default**
1

**Example**
```
racadm getconfig -g cfgNetTuning
```
```
cfgNetTuningNicSpeed=100
cfgNetTuningNicFullDuplex=1
cfgNetTuningNicMtu=1500
cfgNetTuningNicAutoneg=1
```

### 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)
- 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.

cfgNetTuningNicRedundant

Description Specifies either Stacking or Redundant mode for CMC Management Port 2.

Legal Values

- 0 – Stacking
- 1 – Redundant

Default 0 – Stacking

NOTE: When Management Port 2 is set for Redundant but is cabled for Stacking, the downstream CMCs (further from the top-of-rack switch) will not have a network link.

NOTE: When Management Port 2 is set for Stacking but is cabled for Redundant (two connections to the TOR switch), routing loops could cause a network storm.

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 "sslcsgen."

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 1024, 2048, 4096

Default 2048

cfgPCIe

Displays the PCIe reassignment information.

Use this sub command with the getconfig and config commands.

The following section provides information about the objects in the cfgPCIe group.

cfgPCIeReassignmentEnable (Read/Write)

Description Indicates whether the PCIe reassignment is enabled or disabled.

Legal Values

- 0 — Disable
- 1 — Enable

NOTE: Power off all the servers in the FX2s chassis before changing the PCIe reassignment.