iDRAC 8/7 v2.50.50.50 RACADM CLI Guide
Notes, cautions, and warnings

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

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

**WARNING**: A WARNING indicates a potential for property damage, personal injury, or death.
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A Deprecated and New Subcommands
B Legacy and New Groups and Objects
cfgSSADRoleGroupPrivilege (Read or Write)
This document provides information about the RACADM subcommands, supported RACADM interfaces, and property database groups and object definitions for the following:

- iDRAC for Blade Servers
- iDRAC on Rack and Tower Servers

Most of the commands mentioned in this document are applicable for multi-generation servers. That is, the commands are applicable for iDRAC6, iDRAC7, and iDRAC8. For more information on the commands applicable for a particular iDRAC version, see the iDRAC RACADM Support Matrix available at dell.com/esmmanuals.

**NOTE:**

- From iDRAC version 2.00.00.00, the guide provides information specific to iDRAC. For information specific to Chassis Management Controller (CMC) M1000e, refer to Chassis Management Controller M1000e Version 5.0 RACADM Command Line Reference Guide available at dell.com/support/manuals.
- The appendix section in the guide provides:
  - List of deprecated subcommands.
  - List of legacy groups and objects with the equivalent new groups and objects.

Topics:

- New in this release
- Supported RACADM Interfaces
- RACADM Syntax Usage
- Supported RACADM Subcommands
- Other Documents You May Need
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New in this release

- Enhanced support for client IP address blocking.
- Added support to enable/disable of virtual console video encryption.
- Added support to enable/disable virtual media operations and virtual media encryption.

Supported RACADM Interfaces

The RACADM command-line utility provides a scriptable interface that allows you to locally configure or remotely configure your iDRAC. 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 dell.com/support.

The RACADM utility supports the following interfaces:

- Local — Supports running RACADM commands from the managed server’s operating system. To run local RACADM commands, install the OpenManage software on the managed server. Only one instance of Local RACADM can be executed on a system at a time. If you try to open another instance, an error message is displayed and the second instance of Local RACADM closes immediately. To
download the local RACADM tool from support.dell.com, select **Drivers and Downloads**, select a server, and then select **Systems Management > Dell Toolkit**.

**NOTE:** Local racadm and local racadm proxy runs with root user privilege.

- SSH or Telnet — Also known as Firmware RACADM. Firmware RACADM is accessible by logging in to iDRAC using SSH or Telnet. Similar to Remote RACADM, at the RACADM prompt, directly run the commands without the RACADM prefix.
- Remote — Supports running RACADM commands from a remote management station such as a laptop or desktop. To run Remote RACADM commands, install the DRAC Tools utility from the OpenManage software on the remote computer. To run Remote RACADM commands:
  - Formulate the command as a SSH or Telnet RACADM command.

For more information about the options, see **RACADM Subcommand Details**. To download the local RACADM tool from dell.com/support, click **Servers, Storage & Networking** in the **General Support** section. Click **PowerEdge**, click the required PowerEdge system, and then click **Drivers & downloads**.

### RACADM Syntax Usage

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

### SSH, Telnet, or Remote RACADM

- Use the following syntax:
  
  **racadm -r** `<racIPAddr>` **-u username -p password <subcommand>`

  **Example**

  ```bash
  racadm getsysinfo
  racadm -r 192.168.0.2 -u username -p xxx getsysinfo
  racadm -r 192.168.0.2 -u username -p xxx getconfig -g cfgchassispower
  ```

### Remote RACADM

- Use the following syntax:
  
  **racadm -r** `<racIPAddr>` **-u <username> -p <password> <subcommand>`

  **Example**

  ```bash
  racadm -r 192.168.0.2 -u root -p xxxx getsysinfo
  ```

  **Security Alert:** Certificate is invalid - Certificate is not signed by Trusted Third Party

  Continuing execution.

  **NOTE:** The following command does not display a security error:

  ```bash
  racadm -r 192.168.0.2 -u noble -p xxx getsysinfo --nocertwarn
  ```

### Accessing Indexed-Based Device Groups and Objects

- To access any object, run the following syntax:
  
  `device.<group name>.<index>.<object name>`

- To display the supported indexes for a specified group, run:
  
  **racadm get device.<group name>**

  **Example**

  ```bash
  racadm get nic.nicconfig
  NIC.nicconfig.1 [Key=NIC.Integrated.1-1-1#nicconfig]
  ```
To display the object list for the specified group, run:

```
racadm get device.<group name>..<index>
```

**Example**

```
racadm get nic.nicconfig.2
[Key=NIC.Integrated.1-2-1#nicconfig]
BannerMessageTimeout=5
BootStrapType=AutoDetect
HideSetupPrompt=Disabled
LegacyBootProto=NONE
LnkSpeed=AutoNeg
#VLanId=1
VLanMode=Disabled
```

To display a single object for the specified group, run:

```
racadm get device.<group name>..<index>.<object name>
```

**Example**

```
racadm get nic.nicconfig.3.legacybootproto
[Key=NIC.Integrated.1-3#NICConfig]
Legacybootproto=PXE
```

## RACADM Command Options

The following table lists the options for the RACADM command:

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<tr>
<th>Option</th>
<th>Description</th>
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<tr>
<td>-r &lt;racIpAddr&gt;</td>
<td>Specifies the controller’s remote IP address.</td>
</tr>
<tr>
<td>-r &lt;racIpAddr&gt; : &lt;port number&gt;</td>
<td>Use &lt;port number&gt; if the iDRAC port number is not the default port (443).</td>
</tr>
<tr>
<td>-u &lt;username&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 (interactive) 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>--nocertwarn</td>
<td>Does not display certificate related warning message.</td>
</tr>
</tbody>
</table>

## Using The Autocomplete Feature

Use the Autocomplete feature to:

- Display all the available RACADM commands in the alphabetical order on pressing the Tab key at the prompt.
- View the complete list, enter the starting letter of the command at the prompt and press Tab key.
- Navigate the cursor within a command, press:
  - Home key: directs to the starting of the command.
**End** key: directs to the end of the command.

- View the history of the commands that were run in the current session, press **up** and **down** arrow key.
- Exit the Autocomplete mode, enter **Quit**, **Exit**, or press **Ctrl+D** key.

For example:

- **Example 1:** `racadm> <press tab>`
  
  arp
  autoupdatescheduler
  clearasrscreen
  clearpending
  closessn
  clrraclog
  ...
  ...
  ...
  ...
  ...
  ...
  ...
  ...
  vflashsd
  vflashpartition
  vmdisconnect
  cd
  quit

- **Example 2:** `racadm> get <press tab>`

  get
  getconfig
  getled
  getniccfg
  getraclog
  getractime
  getsel
  getsensorinfo
  getssninfo
  getsvctag
  getsysinfo
  gettracelog
  getversion

- **Example 3:**

  `racadm> getl<press tab>`

  `racadm> getled <press enter> or <racadm getled>
  LEDState: Not-Blinking`

- **Example 4:**

  `racadm>> get bios.uefiBootSettings
  BIOS.UefiBootSettings
  BIOS.UefiBootSettings.UefiBootSeq
  BIOS.UefiBootSettings.UefiPxeIpVersion`

**NOTE:** In the RACADM autocomplete mode, some of the RACADM commands specific to certain server platforms may not be available. In such scenarios, execute the RACADM command in the normal execution mode.

### Lifecycle Controller Log

Lifecycle Controller logs provide the history of changes related to components installed on a managed system. You can also add work notes to each log entry.

The following events and activities are logged:

- System events
• Storage devices
• Network devices
• Configuration
• Audit
• Updates

You can view and filter logs based on the category and severity level. You can also export and add a work note to a log event.

If you initiate configuration jobs using RACADM CLI or iDRAC web interface, the Lifecycle log captures the information about the user, interface used, and the IP address of the system from which you initiate the job.

**Supported RACADM Subcommands**

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

**Table 2. Supported RACADM Subcommands**

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<td>autoupdatescheduler</td>
<td>Yes</td>
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<tr>
<td>arp</td>
<td>Yes</td>
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<tr>
<td>clearsasrscreen</td>
<td>Yes</td>
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<tr>
<td>clearpending</td>
<td>Yes</td>
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<td>closessn</td>
<td>Yes</td>
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<td>clrsel</td>
<td>Yes</td>
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<td>config</td>
<td>Yes</td>
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<td>coredump</td>
<td>Yes</td>
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<td>coredumpdelete</td>
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<td>diagnostics</td>
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<td>eventfilters</td>
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<td>fcstatistics</td>
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<td>get</td>
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<td>getconfig</td>
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<td>gethostnetworkinterfaces</td>
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<td>getraclog</td>
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<td>getractime</td>
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<td>gettraceolog</td>
<td>Yes</td>
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<td>getversion</td>
<td>Yes</td>
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<td>No</td>
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<td>lclog</td>
<td>Yes</td>
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<td>Yes</td>
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<td>nicstatistics</td>
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<td>ping</td>
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<td>ping6</td>
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<td>racdump</td>
<td>Yes</td>
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<td>racreset</td>
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<td>Yes</td>
</tr>
<tr>
<td>sslcsrgen</td>
<td>Yes</td>
</tr>
<tr>
<td>sslkeyupload</td>
<td>No</td>
</tr>
<tr>
<td>sslresetcfg</td>
<td>Yes</td>
</tr>
<tr>
<td>storage</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### Other Documents You May Need

In addition to this guide, you can access the following guides available on the Dell Support website at [www.dell.com/esmmanuals](http://www.dell.com/esmmanuals). To access the documents, click the appropriate product link.

- The *Integrated Dell Remote Access Controller 8 (iDRAC8) User’s Guide* provides information about configuring and using an iDRAC to remotely manage and monitor your system and its shared resources through a network.
- The *iDRAC RACADM Support Matrix* provides the list of sub commands and objects that are applicable for a particular iDRAC version.
- Documentation specific to your third-party management console application.
- The *Dell OpenManage Server Administrator’s User’s Guide* provides information about installing and using Dell OpenManage Server Administrator.
- The *Dell Update Packages User’s Guide* provides information about obtaining and using Dell Update Packages as part of your system update strategy.
- The *Glossary* provides information about the terms used in this document.

The following system documents are also available to provide more information about the system in which iDRAC is installed:

- The *Hardware Owner’s Manual* provides information about system features and describes how to troubleshoot the system and install or replace system components.
- Documentation for any components you purchased separately provides information to configure and install the options.
- Release notes or readme files may be included to provide last-minute updates to the system or documentation or advanced technical reference material intended for experienced users or technicians.

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.

See the *Safety and Regulatory* information that is shipped with your system.
NOTE: Warranty information may be included within this document or as a separate document.

Accessing documents from the Dell EMC support site

You can access the required documents using the following links:

- For Dell EMC Enterprise Systems Management documents — Dell.com/SoftwareSecurityManuals
- For Dell EMC OpenManage documents — Dell.com/OpenManageManuals
- For Dell EMC Remote Enterprise Systems Management documents — Dell.com/esmmanuals
- For iDRAC and Dell EMC Lifecycle Controller documents — Dell.com/idracmanuals
- For Dell EMC OpenManage Connections Enterprise Systems Management documents — Dell.com/OMConnectionsEnterpriseSystemsManagement
- For Dell EMC Serviceability Tools documents — Dell.com/ServiceabilityTools
- For Client Command Suite Systems Management documents — Dell.com/DellClientCommandSuiteManuals

a. Go to Dell.com/Support/Home.
b. Click Choose from all products.
c. From All products section, click Software & Security, and then click the required link from the following:
   - Enterprise Systems Management
   - Remote Enterprise Systems Management
   - Serviceability Tools
   - Dell Client Command Suite
   - Connections Client Systems Management
d. To view a document, click the required product version.

- Using search engines:

  - Type the name and version of the document in the search box.

Contacting Dell

NOTE: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

1. Go to Dell.com/support.
2. Select your support category.
3. Verify your country or region in the Choose a Country/Region drop-down list at the bottom of the page.
4. Select the appropriate service or support link based on your need.
This section provides detailed description of the RACADM subcommands including the syntax and valid entries.

Topics:

- Guidelines to Quote Strings Containing Special Characters When Using RACADM Commands
- help and help subcommand
- arp
- autoupdatescheduler
- cd
- cd..
- clearsrscreen
- clearpending
- closessn
- clrsel
- config
- coredump
- coredumpdelete
- diagnostics
- eventfilters
- fcstatistics
- frontpanelerror
- fwupdate
- get
- getconfig
- gethostnetworkinterfaces
- getled
- getniccfg
- getracelog
- gettractime
- getsel
- getsensorinfo
- getssninfo
- getsvctag
- getsysinfo
- gettraceolog
- getversion
- hwinventory
- ifconfig
- inlettemphistory
- jobqueue
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 double quotation marks:

- $ (dollar sign)
- " (double quotation mark)
- ` (backward quotation mark)
- \ (backward slash)
- ~ (tilde)
- | (vertical bar)
- ( (left parentheses)
- ) (right parentheses)
- & (ampersand)
- > (greater than)
- < (less than)
- # (pound)
- ASCII code 32 (space)

There are different escaping rules for double quotation marks.

**For using double quotation marks:**

The following characters must be escaped by prepending a backward slash:

- $ (dollar sign)
- " (double quotation mark)
- ` (back quotation mark)
- \ (backward slash)

**help and help subcommand**

**Table 3. help and help subcommand**

<table>
<thead>
<tr>
<th>Description</th>
<th>Lists all the subcommands available for use with RACADM and provides a short description about each subcommand. You may also type a subcommand, group, object or Fully Qualified Descriptor (FQDD) name after help.</th>
</tr>
</thead>
</table>
| **Synopsis** | racadm help  
 racadm help <subcommand> |
| **Input** | <subcommand> — specifies the subcommand for which you need the help information.  
<device name> — specifies the device name such as iDRAC, BIOS, NIC, LifecycleController, FC, system, or Storage.  
<group> — specifies the group name supported by the corresponding device.  
<object> — specifies the object for the entered group. |
| **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 <device name> <Group> command displays information for the specified group.  
The racadm help <device name> <Group> <Object> command displays information for the specified object. |
arp

Description
Displays the contents of the Address Resolution Protocol (ARP) table. ARP table entries cannot be added or deleted.
To use this subcommand, you must have Debug privilege.

Synopsis
racadm arp

Input
N/A

Example
racadm arp

Output

<table>
<thead>
<tr>
<th>Address</th>
<th>HW Type</th>
<th>HW Address</th>
<th>Mask</th>
<th>Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>192.168.1.1</td>
<td>Ether</td>
<td>00:0d:65:f3:7c:bf</td>
<td>C</td>
<td>eth0</td>
</tr>
</tbody>
</table>

autoupdatescheduler

Description
You can automatically update the firmware of the devices on the server.
To run this subcommand, you must have the Server Control privilege.

NOTE:
- The autoupdatescheduler subcommand can be enabled or disabled.
- Lifecycle Controller and CSIOR may not be enabled to run this subcommand.
- The autoupdatescheduler can be enabled or disabled. For more information, see LifecycleController.LCAttributes.autoupdate (Read or Write)
- The minimum Lifecycle Controller version required is Lifecycle Controller 1.3.
- When a job is already scheduled and the clear command is run, the scheduling parameters are cleared.
- If the network share is not accessible or the catalog file is missing when the job is scheduled, then the job is unsuccessful.

Synopsis
- To create the AutoUpdateScheduler, run the command.
  racadm autoupdatescheduler create -u <user> -p <password> -l <location> -f <filename> -time <time> -dom <DayOfMonth> -wom <WeekOfMonth> -dow <DayOfWeek> -rp <repeat> -a <applyreboot> -ph <proxyHost> -pu <proxyUser> -pp <proxyPassword> -po <proxyPort> -pt <proxyType>
- To view AutoUpdateScheduler parameter, run the command.
  racadm autoupdatescheduler view
- To clear and display AutoUpdateScheduler parameter, run the command.
  racadm autoupdatescheduler clear

NOTE: After the parameters are cleared, the AutoUpdateScheduler is disabled. To schedule the update again, enable the AutoUpdateScheduler.

Input
Valid options:
- -u — Specifies the user name of the remote share that stores the catalog file.
  NOTE: For CIFS, enter the domain name as domain or username.
- -p — Specifies the password of the remote share that stores the catalog file.
- -l — Specifies the network share (NFS, CIFS, FTP, TFTP, or HTTP) location of the catalog file. IPv4 and IPv6 addresses are supported.
-f — Specifies the catalog location and the filename. If the filename is not specified, then the default file used is catalog.xml.

NOTE: If the file is in a subfolder within the share location, then enter the network share location in the -l option and enter the subfolder location and the filename in the -f option.

- ph — Specifies the FTP/HTTP proxy host name.
- pu — Specifies the FTP/HTTP proxy user name.
- pp — Specifies the FTP/HTTP proxy password.
- po — Specifies the FTP/HTTP proxy port.
- pt — Specifies the FTP/HTTP proxy type.
- time — Specifies the time to schedule an autoupdate in the HH:MM format. This option must be specified.
- dom — Specifies the day of month to schedule an autoupdate. Valid values are 1–28, L (Last day) or '*' (default — any day).
- wom — Specifies the week of month to schedule an autoupdate. Valid values are 1–4, L (Last week) or '*' (default — any week).
- dow — Specifies the day of week to schedule an autoupdate. Valid values are sun, mon, tue, wed, thu, fri, sat, or '*' (default — any day).

NOTE: The -dom, -wom, or -dow option must be included in the command for the autoupdate schedule. The * value for the options must be included within ' ' (single quotation mark).

- rp — Specifies the repeat parameter. This parameter must be specified.
  - If the -dom option is specified, then the valid values for -rp are 1–12.
  - If the -wom option is specified, then the valid values for -rp are 1–52.
  - If the -dow option is specified, then the valid values for -rp are 1–366.
- a — Applies reboot (1 — Yes, 0 — No). This option must be specified.

Example

Usage examples:

- To configure autoupdate feature settings.
  - For CIFS, run the command:
    ```
    racadm autoupdatescheduler create -u domain/admin -p xxx -l //1.2.3.4/share -f cat.xml -time 14:30 -wom 1 -dow sun -rp 1 -a 1
    ```
  - For NFS, run the command:
    ```
    racadm autoupdatescheduler create -u nfsadmin -p nfspwd -l 1.2.3.4:/share -f cat.xml -time 14:30 -dom 1 -rp 5 -a 1
    ```
  - For FTP, run the command:
    ```
    ```
  - For HTTP, run the command:
    ```
    ```
  - For TFTP, run the command:
    ```
    racadm autoupdatescheduler create -l tftp://1.2.3.4 -f cat.xml.gz -time 14:30 -dom 1 -rp 5 -a 1
    ```
• To view AutoUpdateScheduler parameter:
  
racadm autoupdatescheduler view
  hostname = 192.168.0
  sharename = nfs
  sharetype = nfs
  catalogname = Catlog.xml
  time = 14:30
dayofmonth = 1
  repeat = 5
  applyreboot = 1
  idracuser = racuser

• To clear and display AutoUpdateScheduler parameter:
  racadm autoupdatescheduler clear
  RAC1047: Successfully cleared the Automatic Update (autoupdate) feature settings

**cd**

Description
To change the current working object, use this command.

Synopsis
```
racadm> cd <object>
```

Input
```
racadm> cd <object>
```

Output
Displays the new prompt.

Example

• **Example 1:** To navigate to the system device type directory:
  
  racadm>>cd system
  racadm/system>

• **Example 2:** To run all the power-related get or set commands:
  
  racadm/system>cd power
  racadm/Power>

**cd..**

Description
To go back to the previous directory, use this command.

Synopsis
```
racadm> cd..
```

Input
```
racadm> cd..
```

Output
To traverse back to the previous directory, use the command.

Example

• **Example 1:** To traverse back from power to system object:
  
  Input: racadm/power> cd..
  
  Output:
  system>>

• **Example 2:** To traverse back from system object to the prompt:
  
  Input: racadm/system> cd..
  
  Output:
  racadm>>
clearasrscreen

Description: Clears the last crash (ASR) screen that is in memory. For more information, see "Enabling Last Crash Screen" section in the iDRAC User’s Guide.

NOTE: To run this subcommand, you must have the Clear Logs permission.

Synopsis: racadm clearasrscreen

Input: None

Output: Clears the last crash screen buffer.

Example: racadm clearasrscreen

clearpending

Description: Deletes the pending values of all the attributes (objects) in the device (NIC, BIOS, FC, and Storage).

NOTE: If any attribute is not modified or a job is already scheduled for the same device, then the pending state is not cleared or deleted.

Synopsis: racadm clearpending <FQDD>

Input: <FQDD> — The values are:

- BIOS FQDD
- NIC FQDD
- FC FQDD
- Storage controller FQDD

Output: A message is displayed indicating that the pending state is cleared or deleted.

Example: racadm clearpending NIC.Integrated.1-1
closessn

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

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

NOTE: This subcommand ends all the sessions other than the current session.

Synopsis:

- racadm closessn -i <session_ID>
- racadm closessn -a
- racadm closessn -u <username>

Input:

- -i <session_ID> — The session ID of the session to close, which can be retrieved using RACADM getssninfo subcommand.
  Session running this command cannot be closed.
- -a — Closes all sessions.
• -u <username> — Closes all sessions for a particular user name.

Output
Successful or error message is displayed.

Example
• Closes the session 1234.
  racadm closessn -i 1234
• Closes all the sessions other than the active session for root user.
  racadm closessn -u root
• Closes all the sessions.
  racadm closessn -a

clrsel

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

To use this subcommand, you must have Clear Logs permission.

Synopsis
racadm clrsel [-m <module>]

Input
-m <module> must be one of the following values:
  • server-<n> — where n=1 to 16
  • server-<nx> — where n=1 to 8; x = a, b, c, d (lower case)

Example
• racadm clrsel
  The SEL was cleared successfully
• racadm clrsel -m server-1
  Clear SEL log on server 1

config

Description
Allows you to set iDRAC configuration parameters individually or to batch them as part of a configuration file and then modify iDRAC configuration properties. If the data is different, the iDRAC object is written with a new value.

NOTE: This subcommand will be deprecated in the later versions. For information about configurations, see the set subcommand.

Synopsis
• racadm config -g <group> -o <object> <value>
• racadm config -g <group> -o <object> -i <index> <value>
• racadm config -f <filename> -o [-c] [-p] [-continue]

NOTE:
• The configuration file retrieved using remote RACADM is not interoperable. For the config racadm -r 192.168.0 -u root -p xxx config -f c:\config.txt command, use the configuration file retrieved from the same interface. For example, for the config racadm -r 192.168.0 -u root -p xxx config -f c:\config.txt, use the file generated from getconfig command racadm -r 192.168.0 -u root -p xxx getconfig -f c:\config.txt.
• -f is only applicable for remote RACADM.
Input

- **-f** — The -f <filename> option causes config to read the contents of the file specified by <filename> and configure iDRAC. The file must contain data in the format specified in the section Parsing Rules in the iDRAC User’s Guide available at www.dell.com/idracmanuals.

**NOTE:** The -f option is not supported for the Serial or Telnet or SSH console.

- **continue** — This option is used with -f option only. If configuration through file is unsuccessful for a group, then configuration continues with the next group in the file. If this option is not used, then configuration stops when it is unsuccessful for a particular group. After the unsuccessful group, the rest of the groups are not configured.

- **-p** — This option must be used with the -f option. It directs config to delete the password entries contained in the config file -f <filename> after the configuration is complete.

To apply the password, you must remove the preceding Read-Only marker '#' in the config file before executing the config -f command.

- **-g** — The -g <groupName>, or group option, must be used with the -o option. The <groupName> specifies the group containing the object that is to be set.

- **-o** — The -o <objectName>, or object option, must be used with the -g option. This option specifies the object name that is written with the string <value>.

- **<value>** — Value to set to configuration object.

- **-i** — The -i <index>, or index option, is valid only for indexed groups and can be used to specify a unique group (used with -g and -o). 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.

- **nx** is allowed for servers.

- **-c** — This option performs validation but do not configure.

Output

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

- Invalid syntax, group name, object name, index or other invalid database members.
- If the RACADM command-line interface is unsuccessful.

Examples

- To configure a single property of a group:
  
racadm config -g cfgSerial -o cfgSerialBaudRate

- Modify a user password:
  
racadm config -g cfgUserAdmin -o cfgUserAdminPassword -i 3 newpassword

- Configure a RAC from a configuration file:
  
racadm config -f config.txt

- Configure a RAC from a configuration file and continue if a group fails to get configured:
  
racadm set -f config.txt --continue

coredump

Description

Displays detailed information related to any recent critical issues that have occurred with iDRAC. The coredump information can be used to diagnose these critical issues. If available, the coredump information is persistent across iDRAC power cycles and remains available until either of the following conditions occur:

- The coredump information is deleted using the coredumpdelete subcommand.

For more information about clearing the coredump, see the coredumpdelete.

**NOTE:** To use this subcommand, you must have the Execute Debug privilege.

Synopsis

racadm coredump
Example

- racadm coredump
  There is no coredump currently available.
- racadm coredump
  Feb 19 15:51:40 (none) last message repeated 5 times
  Feb 19 15:52:41 (none) last message repeated 4 times
  Feb 19 15:54:12 (none) last message repeated 4 times
  Feb 19 15:56:11 (none) last message repeated 2 times
  Feb 22 11:46:11 (none) kernel:

coredumpdelete

Description

Deletes any currently available coredump data stored in the RAC.

To use this subcommand, you must have Execute Debug Command permission.

NOTE: If a coredumpdelete command is issued and a coredump is not currently stored in the RAC, the command displays a success message. This behavior is expected. See the coredump subcommand for more information about viewing a coredump.

Synopsis

racadm coredumpdelete

Output

Coredump is deleted.

Example

racadm coredumpdelete

Coredump request completed successfully

diagnostics

Description

Collects and exports remote diagnostics report from iDRAC.

The results of the latest successfully run remote diagnostics are available and retrievable remotely through an NFS or a CIFS share.

Synopsis

To run a remote diagnostic report:

racadm diagnostics run -m <mode> -r <reboot type> -s <start time> -e <expiration time>

To export a remote diagnostic report:

racadm diagnostics export -f <file name> -l <NFS or CIFS share location> -u <username> -p <password>

Input

- -m <mode> — Specifies the type of diagnostic mode. The types are:
  - 0 (Express) — The express mode executes a subset of diagnostic tests.
  - 1 (Extended) — The extended mode executes all available diagnostics tests.
  - 2 (Both) — Runs express and extended tests serially in sequence.
- -f <filename> — Specifies the name of the configuration file.
- -l — Specifies the location of the network share (NFS or CIFS).
- -u <username> — Specifies the user name of the remote share to import the file.
- -p <password> — Specifies the password of the remote share to import the file.
- -r <reboot type> — Specifies the reboot type. The type can be one of the following:
• pwrclkh — Power cycle
• Graceful — Graceful reboot without forced shutdown
• Forced — Graceful reboot with forced shutdown

- s <start time> — Specifies the start time for the scheduled job in yyyymmddhhmmss format. The default value TIME_NOW starts the job immediately.
- e <expiration time> — Specifies the expiry time for the scheduled job in yyyymmddhhmmss format. The default value TIME_NA does not apply the waiting time.

NOTE: For the diagnostic report run operation, the time difference between the -s and -e options must be more than five minutes.

Output
Provides the Job ID for the diagnostic operation.

Examples
- To initiate a remote diagnostic operation:
  ```bash
  racadm diagnostics run -m 1 -r forced -s 20121215101010 -e TIME_NA
  ```
- To export a remote diagnostics report to CIFS share:
  ```bash
  racadm diagnostics export -f diagnostics -l //192.168.0/cifs -u administrator -p xxx
  ```
- To export a remote diagnostics report to NFS share:
  ```bash
  racadm diagnostics export -f diagnostics -l 192.168.0:/nfs -u administrator -p xxx
  ```

eventfilters

Description
Displays the list of event filter settings.
To use this subcommand with the set and test option, you must have the Administrator privilege.

Synopsis
```
racadm eventfilters <eventfilters command type>
racadm eventfilters get -c <alert category>
racadm eventfilters set -c <alert category> -a <action> -n <notifications>
racadm eventfilters set -c <alert category> -a <action> -r <recurrence>
racadm eventfilters test -i <Message ID to test>
```

NOTE: The general format of an alert category:
```
idrac.alert.category.[subcategory].[severity]
```

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

Valid Category values are:
- All
- System
- Storage
- Updates
- Audit
- Config
- Worknotes

Valid Severity values are:
- Critical
- Warning
Valid examples of alert queries are:

- idrac.alert.all
- idrac.alert.audit
- idrac.alert.audit.lic
- idrac.alert.audit.warning
- idrac.alert.audit.lic.critical

**Input**

- **get** — Displays the list of eventfilter settings.
- **set** — Configures the actions and notifications for a given eventfilter configuration.
- **-i** — Message ID for which the simulation is needed.
- **-c** — Alert category of the specific event filter.
- **-a** — The action that must be invoked when the event occurs. Valid values are none, powercycle, poweroff, or systemreset.
- **-n** — The notification is sent when the event occurs. Valid values are all, snmp, ipmi, ws-events, oslog, email, remotesyslog or none. You can append multiple notifications separated by a comma. You cannot enter the values all or none with other notifications. If incorrect notification is specified along with other valid notifications, the valid and invalid notification set is failed.
- **-r** — Event generation interval. This option is applicable only to the temperature statistics subcategory tmps. You can use this option as a stand-alone or with -n and -a.

**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 0–365. 0 disables the event generation.

**Example**

- Display all available event filter configurations:
  
racadm eventfilters get -c idrac.alert.all

- Display eventfilter configurations for a specific category. For example, audit:
  
racadm eventfilters get -c idrac.alert.audit

- Display eventfilter configurations for a specific subcategory. For example, licensing under the audit category:
  
racadm eventfilters get -c idrac.alert.audit.lic

- Display eventfilter configurations for a specific severity. For example, warning under the audit category:
  
racadm eventfilters get -c idrac.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 idrac.alert.audit.lic.warning

- Clear all available alert settings:
  
racadm eventfilters set -c idrac.alert.all -a none -n none

- Configure using severity as a parameter. For example, all informational events in storage category are assigned power off as action, and email and snmp as notifications:
  
racadm eventfilters set -c idrac.alert.storage.info -a poweroff -n email,snmp

- Configure using subcategory as a parameter. For example, all configurations under the licensing subcategory in the audit category are assigned power off as action and all notifications are enabled:
  
racadm eventfilters set -c idrac.alert.audit.lic -a poweroff -n all

- Configure using subcategory and severity as parameters. For example, all information events under the licensing subcategory in the audit category are assigned power off as action and all notifications are disabled:
  
racadm eventfilters set -c idrac.alert.audit.lic.info -a poweroff -n none

- Configure the event generation interval for temperature statistics:
  
racadm eventfilters set -c idrac.alert.system.tmps.warning -r 10

- Configure the event generation interval and notifications for temperature statistics:
  
racadm eventfilters set -c idrac.alert.system.tmps -r 5 -a none -n snmp
- Send a test alert for the fan event:
  racadm eventfilters test -i FAN0001

**fcstatistics**

**Description**
Displays a list of FCs (FQDDs), managed server for which statistics is available.

**Synopsis**
racadm fcstatistics <FC fqdd>

**Input**
<FC fqdd> — Specify the FQDD of the target FC device.

**Example**
racadm fcstatistics <FC fqdd>

**frontpanelerror**

**Description**
Enables or disables the live-feed of the errors currently being displayed on the LCD screen. For error acknowledge use hide, and error assert use show.

**Synopsis**
racadm frontpanelerror show
racadm frontpanelerror hide

**Input**
- show — to view the errors currently being displayed on the LCD screen.
- hide — to hide the errors currently being displayed on the LCD screen.

**Example**
- racadm frontpanelerror show
  Front Panel Error—Show Enabled.
- racadm frontpanelerror hide
  Front Panel Error—Hide Enabled.

**fwupdate**

**Table 4. fwupdate — Details**

**Description**
Allows you to update the firmware on the server iDRACs device. You can:
- Check the firmware update process status.
- Update iDRAC firmware from FTP or TFTP server by providing an IP address and optional path.
- Update iDRAC firmware from the local file system using Local and Remote RACADM.
- Roll back to the standby firmware.

To use this subcommand, you must have Configure iDRAC permission.

**Synopsis**
racadm fwupdate -s
racadm fwupdate -g -u -a <TFTP_Server_IP_Address>
[-d <path>] [--clearcfg]

racadm -r <iDRAC IP_Address> -u <username> -p <password> fwupdate -f <ftpserver ip> <ftpserver username> <ftpserver password> -d <path> where path is the location on the ftp server where firmimg.d7 is stored.

racadm fwupdate -r
racadm fwupdate -p -u [-d <path>]

30 | RACADM Subcommand Details
NOTE: When attempting to run firmware update task, if the firmware image path length is greater than 256 characters, remote RACADM client exits with the error message "ERROR: Specified path is too long".

Input

- `-u` — The update option performs a checksum of the firmware update file and starts the actual update process. This option may be used along with the `-g` or `-p` options. At the end of the update, IDRAC performs a soft reset.
- `-a` — This option returns the status of the update process.
- `-c` — The `-c` option specifies TFTP server IP address used for firmware image. This option must be used with the `-a` option.
- `-clearcfg` — The `-clearcfg` option removes the previous IDRAC configuration after firmware update.
- `-g` — The get option instructs the firmware to get the firmware update file from the TFTP server. Specify the `-a`, `-u`, and `-d` options. In the absence of the `-a` option, the defaults are read from properties in the group `cfgRemoteHosts`, using properties `cfgRhostsFwUpdateIpAddr` and `cfgRhostsFwUpdatePath`.
- `-p` — The `-p`, or put, option is used to update the firmware file from the managed system to IDRAC. The `-u` option must be used with the `-p` option.

```plaintext
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.
```

NOTE: The `-p` option is supported on local and remote RACADM and is not supported with the serial/Telnet/ssh console and on the Linux operating systems.

- `-r` — The rollback option is used to roll back to the standby firmware.
- `-r` — Specifies the FTP server IP address or FQDN, username, and password used for firmware image. Applies FTP download process for firmware update.

Output

Displays a message indicating the operation that is being performed.

Example

- Uploads a firmware image from the client and start firmware update:
  ```plaintext
  racadm fwupdate -p -u -d /tmp/images
  ```
- Upload firmware image from FTP server and start firmware update:
  ```plaintext
  racadm fwupdate -f 192.168.0.10 test test -d firmimg.d7
  ```
- Upload firmware image from TFTP server and start firmware update:
  ```plaintext
  racadm fwupdate -g -u -a 192.168.0.100 -d /tmp/images
  ```
- Query the current status of the firmware update process:
  ```plaintext
  racadm fwupdate -s
  ```
- Rollback to the standby firmware:
  ```plaintext
  racadm fwupdate -r
  ```
- Upload firmware image from TFTP server, start firmware update. After firmware update is complete, delete previous IDRAC configuration:
  ```plaintext
  racadm fwupdate -g -u -a 192.168.0.100 -d /tmp/images --clearcfg
  ```

NOTE: Firmware update from local RACADM (using `-p` `-u` `-d` options) is not supported on Linux OS.

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

<table>
<thead>
<tr>
<th>FW Update Method</th>
<th>IDRAC on Blade Servers</th>
<th>IDRAC on Rack and Tower Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local RACADM</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Local RACADM-TFTP</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Local RACADM-FTP</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>FW Update Method</td>
<td>iDRAC on Blade Servers</td>
<td>iDRAC on Rack and Tower Servers</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Remote RACADM</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Remote RACADM-TFTP</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Remote RACADM-FTP</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Firmware RACADM-TFTP</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Firmware RACADM-FTP</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**get**

**Description**
Displays the value of one or more objects. The `get` sub-command has two forms.

- Displays the value of a single object.
- Exports the value of multiple objects to a file.

It supports multiple object value export in two file formats:

- INI format — The INI format files can be exported to a local file only
- Server Configuration Profile XML format — XML format files can be exported to a local file, to an NFS network share or to a CIFS network share.

**NOTE:** To run the `get` sub-command for Server Configuration Profile XML files, use the Lifecycle Controller version 1.1 or later.

**NOTE:** Some objects may have a pending value if a `set` operation is performed on the object through a reboot job. To complete the pending operation, schedule the job using a `jobqueue` command, and then check for completion of the job using the returned Job ID. For more information, see `jobqueue`.

**Synopsis**

**Single-object Get**

```bash
racadm get <FQDD Alias>.<group>
```

```bash
racadm get <FQDD Alias>.<group>.<object>
```

```bash
racadm get <FQDD Alias>.<group>[<index>].<object>
```

```bash
racadm get <FQDD Alias>.<index>.<group>.<index>.<object>
```

**Multi-object Get**

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

```bash
racadm get -f <filename> -t xml -l <NFS share> [---clone | --replace ] [---includeph]
```

```bash
racadm get -f <filename> -t xml -l <NFS share> -c <FQDD>[,<FQDD>]*
```

```bash
racadm get -f <filename> -t xml -u <username> -p <password> -l <CIFS share> [---clone | --replace ] [---includeph]
```

```bash
racadm get -f <filename> -t xml -u <username> -p <password> -l <CIFS share> -c <FQDD>[,<FQDD>]*
```

**Input**

- `<FQDD Alias>`
  - Examples for FQDDs
    - `System.Power`
• System.Power.Supply
• System.Location
• LifecycleController.LCAtributes
• System.LCD
• iDRAC.Serial

For the list of supported groups and objects under the get command, see Database Objects With Get and Set Commands

- <group> — Specifies the group containing the object that must be read.
- <object> — Specifies the object name of the value that must be read.
- <index> — Specifies where FQDD Aliases or Groups must be indexed.
- -f <filename> — This option enables you to export multiple object values to a file. This option is not supported in the Firmware RACADM interface.
- -u — Specifies user name of the remote CIFS share to which the file has to be exported.
- -p — Specifies password for the remote CIFS share to which the file has to be exported.
- -l — Specifies network share location to which the file will be exported.
- -t — Specifies the file type to be exported.

The valid values are:
- xml — It exports the SCP xml format file, either to a local or network share file.
- ini — It exports the legacy configuration file. If -t is not specified, then the ini format file is exported. It can only be exported to a local file.

1) **NOTE:** To import or export Server Configuration Profile xml files, Lifecycle Controller version 1.1 or later is required.

- --clone — Gets the configuration .xml files without system-related details such as service tag. The .xml file received does not have any virtual disk creation option.
- --replace — Gets the configuration .xml files with the system-related details such as service tag.
- -c — Specifies the FQDD or list of FQDDs separated by , of the components for which the configurations should be exported. If this option is not specified, the configuration related to all the components are exported.
- --includeph — Specifies that the output of the passwords included in the exported configuration .xml file are in the hashed format.

1) **NOTE:** if --includeph is not used, the output of the passwords will be in the .xml file in clear text.

1) **NOTE:** For --clone and --replace options, only .xml file template is received. These options --clone and --replace cannot be used in the same command.

**Examples**

- Get system LCD information.
  racadm get system.lcdLCDUserString
- Display an entire group, in this case the topology configuration.
  racadm get system.location
- Display a single object from a particular group.
  racadm get system.location.rack.name
- Export the xml configuration to a CIFS share.
  racadm get -f file -t xml -u myuser -p xxx -l //192.168.0/share
- Export the xml configuration to an NFS share.
  racadm get -f file -t xml -l 192.168.0:/myshare
- Export a "cloned" xml configuration to a CIFS share
  racadm get -f xyz_temp_clone -t xml -u Administrator -p xxx -l //192.168.0/xyz --clone
- Export a “replace” xml configuration to a CIFS share.
  racadm get -f xyz_temp_replace -t xml -u Administrator -p xxx -l //192.168.0/xyz --replace
- Export the xml configuration of the IDRAC component to a CIFS share.
  racadm get -f file -t xml -u myuser -p xxx -l //192.168.0/share -c iDRAC.Embedded.1
- Include password hash in the configuration .xml file.
  racadm get -f<filename> -t xml -l<NFS or CIFS share> -u<username> -p<password> -t xml --includeph

getconfig

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

NOTE: This subcommand is deprecated. For viewing the configuration objects and its values, use get subcommand. For more information, see the Integrated Dell Remote Access Controller (IDRAC8) and IDRAC7 RACADM Command Line Interface Reference Guide available at dell.com/support/manuals.

Synopsis
racadm getconfig -f <filename>
racadm getconfig -g <groupName> [-i <index>]
racadm getconfig -u <username>
racadm getconfig -h
racadm getconfig -g <groupName> -o <objectName> [-i index]

Input
- -f — The -f <filename> option directs getconfig to write the entire IDRAC configurations to a configuration file. This file can be used for batch configuration operations using the config subcommand.
  NOTE: This option is supported only on remote interfaces.
- -g — The -g <groupName> or group option, is 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, then 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 remember exact group names.
- -i — The -i <index> or index option, is valid only for indexed groups and is 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, then a value of 1 is assumed for groups, which are tables that have multiple entries. The -i option enters the index value and not a named value
- -o — The -o <objectname> or object option specifies the object name that is used in the query. This option is optional and can be used with the -g option.
- -u — The -u <username> or user name option, is used to display the configuration for the specified user. The <username> option is the login name for the user.
- -v — The -v option displays more information with the display of the properties and is used with the -g option.

Output
The subcommand displays error message when:
- Invalid syntax, group name, object name, index, or any other invalid database members are entered.
- The RACADM CLI transport is unsuccessful.
If errors are not encountered, this subcommand displays the content of the specified configuration.

Groups
- cfgEmailAlert
  Key Attributes
  cfgEmailAlertAddress
Example

- Displays the configuration properties (objects) that are contained in the group **cfgLanNetworking**.
  
  ```
  racadm getconfig -g cfgLanNetworking
  ```

- Saves all group configuration objects from iDRAC to **myrac.cfg**.
  
  ```
  racadm getconfig -f myrac.cfg
  ```

  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.

  ```
  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.

```
Groups                               Key Attributes
--------------------------------------------------------------------------
cfgEmailAlert                        cfgEmailAlertAddress
cfgLDAPRoleGroup                     cfgLDAPRoleGroupDN
cfgServerInfo                        cfgServerBmcMacAddress
cfgStandardSchema                    cfgSSADRoleGroupName
cfgTraps                             cfgTrapsAlertDestIPAddr
cfgUserAdmin                         cfgUserAdminUserName
```

- Displays a list of the available configuration groups on iDRAC in an alphabetical order.
  
  ```
  racadm getconfig -h
  ```

- Displays the configuration properties for the user named **root**.
  
  ```
  racadm getconfig -u root
  ```

- Displays the user group instance at index 2 with verbose information for the property values.
  
  ```
  racadm getconfig -g cfgUserAdmin -i 2 -v
  ```

- Displays an entire group of serial configuration.
  
  ```
  racadm getconfig -g cfgSerial
  ```
- Displays a single object from a particular group.
  
racadm getconfig -g cfgSerial -o cfgSerialBaudRate

- Displays an indexed group.
  
racadm getconfig -g cfgUserAdmin -o cfgUserAdminUserName -i 2

- Displays the current Enhanced Cooling Mode property configuration.
  
racadm getconfig -g cfgThermal

### gethostnetworkinterfaces

**Description**

Displays host network interface details.

**Synopsis**

```
racadm gethostnetworkinterfaces
```

**Examples**

- To display the details of all the network interfaces on the server.
  
racadm gethostnetworkinterfaces

```
Local Area Connection 12
Description              : iDRAC Virtual NIC USB Device #8
Status                   : Up
Interface Type           : Ethernet
DHCP                     : Enabled
DHCP Server V4           : 169.254.0.1
MAC Address              : 00-25-64-F9-7A-E7
IPv4 Address             : 169.254.0.2
Subnet Mask              : 255.255.255.0
IPv6 Address             : fe80::1cce:a0a7:f30e:54fc
Prefix Length            : 64
IPv6 DNS Server Address  0: fec0:0:0:ffff::1
IPv6 DNS Server Address  1: fec0:0:0:ffff::2
IPv6 DNS Server Address  2: fec0:0:0:ffff::3
```

- To display the details of a particular NIC on the server.
  
racadm gethostnetworkinterfaces NIC.Integrated.1-1-1

```
Local Area Connection 12
Description              : Broadcom NetXtreme Gigabit Ethernet
Status                   : Up
Interface Type           : Ethernet
DHCP                     : Enabled
DHCP Server V4           : 10.94.224.25
MAC Address              : 14-FE-B5-FF-B1-9C
IPv4 Address             : 10.94.225.189
Subnet Mask              : 255.255.255.128
IPv6 Address             : fe80::7c5f:a114:84d4:17f6
Prefix Length            : 64
IPv4 Gateway Address     : 10.94.225.129
IPv4 DNS Server Address  0: 10.116.2.250
IPv4 DNS Server Address  1: 10.116.2.251
```

### getled

**Description**

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

**Synopsis**

```bash
racadm getled
```

**Input**

- LED is blinking
- LED is not-blinking

**Output**

- LED is blinking
- LED is not-blinking

**Example**

```bash
racadm getled
LED State : Blinking
racadm getled
LED State : Not-Blinking
```

---

### getniccfg

**Description**

Displays the current and static NIC settings for iDRAC.

**Synopsis**

```bash
racadm getniccfg [-m <module>]
```

**Input**

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

IPv4 settings:

- NIC Enabled = 1
- IPv4 Enabled = 1
- DHCP Enabled = 1
- IP Address = 10.94.225.165
- Subnet Mask = 255.255.255.128
- Gateway = 10.94.225.129

IPv6 settings:

- IPv6 Enabled = 1
- DHCP6 Enabled = 0
- Gateway = ::
- Link Local Address = fe80::f21f:afff:fed0:82d6/64
- 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 =1Gb/s
Duplex Mode =Full Duplex
Active NIC =Dedicated
Static IPv4 settings:
Static IP Address =192.168.0.120
Static Subnet Mask =255.255.255.0
Static Gateway =192.168.0.1
Static IPv6 settings:
Static IP Address 1 =2000:de11:bcd1:fc14:1234:5678:2468:abcd/64
Static Prefix Length =64
Static Gateway =::

NOTE: IPv6 information is displayed only if IPv6 is enabled in iDRAC.

NOTE: IPv6 Address 1 field indicates static IP and IPv6 Address 2 field indicates dynamic IP.

NOTE: LOM Status is displayed only for iDRAC on Rack and Tower servers and is not displayed for iDRAC Enterprise on Blade servers.

Example

- Display iDRAC network settings in server slot 1
  racadm getniccfg -m server-1

getraclog

Description
The getraclog command displays RAC log entries.

Synopsis

- racadm getraclog [-i]
- racadm getraclog [-s <start>] [-c <count>] [--more]

racadm getraclog [-c <count>] [-s <start-record>] [--more]

NOTE: If options are not provided, the entire log is displayed.

Input

- -c — Specifies the number of records to display.

  NOTE: On Local RACADM, the number of logs are restricted to 100 by default.
- --more — Displays one screen at a time and prompts you to continue (similar to the UNIX more command).
- -s — Specifies the starting record used for the display.
NOTE: When Enhanced Chassis Logging and Events feature is enabled, then -i and --more options are not displayed.

Output

SeqNumber = 286
Message ID = USR0005
Category = Audit
AgentID = RACLOG
Severity = Information
Timestamp = 2012-10-05 06:25:27
Message = Login failed from processdisco06a: 192.168.0
Message Arg 1 = processdisco06a
Message Arg 2 = 10.92.68.245
FQDD = iDRAC.Embedded.1

Example

Display the recent 2 records for RAC log

```
racadm getraclog -c
2
SeqNumber = 4102
Message ID = LIC201
Category = Audit
AgentID = DE
Severity = Warning
Timestamp = 2014-06-12 01:38:19
Message = License yPMRJGuEf7z5HG8LO7gh assigned to device iDRAC expires in 4 days.
Message Arg 1 = yPMRJGuEf7z5HG8LO7ghMessage Arg 2 = iDRACMessage Arg 3 = 4
```

```
SeqNumber = 4101
Message ID = USR0032
Category = Audit
AgentID = RACLOG
Severity = Information
Timestamp = 2014-06-11 19:54:00
Message = The session for root from 192.168.0 using RACADM is logged off.
Message Arg 1 = root
Message Arg 2 = 10.94.98.92
Message Arg 3 = RACADM
FQDD = iDRAC.Embedded.1
```

getractime

**Description**

Displays the current iDRAC time.

**Synopsis**

```
• racadm getractime [-d]
```

**Input**

```
• -d — Displays the time in the format, YYYYMMDDhhmms.
```

**Output**

The current iDRAC time is displayed.

**Example**

```
• racadm getractime
  Mon May 13 17:17:12 2013
```

```
• racadm getractime -d
  20141126114423
```
**getsel**

**Description**
Displays all system event log (SEL) entries in iDRAC.

**Synopsis**
- `racadm getsel [-i] [-m <module>]`
- `racadm getsel [-s <start>][-c <count>] [-m <module>] [--more]`

1 **NOTE:** If no arguments are specified, the entire log is displayed.

**Input**
- `-i` — Displays the number of entries in the SEL.
- `-s` — Displays the starting record number.
- `-c` — Specifies the number of records to display.
- `-m <module>` — Must be one of the following values:
  - `server-n` : where n = 1–16
  - `server-nx` : where n = 1–8; x = a, b, c, d (lower case)
- `--more` — Displays one screen at a time and prompts the user to continue (similar to the UNIX `more` command.)

**Example**
- Display entire log.
  `racadm getsel`
- Display number of records in log.
  `racadm getsel -i`

**getsensorinfo**

**Description**
Displays the status for system sensors.

1 **NOTE:** For Dell PowerEdge FX2 chassis with FM120x4 server, the power related information is not displayed.

1 **NOTE:** General purpose graphical processing unit (GPGPU) status is displayed only on PowerEdge C4130 servers.

**Synopsis**
- `racadm getsensorinfo`
- `racadm getsensorinfo -c`

**Input**
- `-c` — Compact output format.

1 **NOTE:** Chassis Controller is supported only on Dell PowerEdge FX2 and GPU sensors are displayed only on PowerEdge C4130 servers.

**Example**

<table>
<thead>
<tr>
<th>&lt;Num&gt;</th>
<th>&lt;sensorName&gt;</th>
<th>&lt;status&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IO-Cable</td>
<td>OK</td>
</tr>
<tr>
<td>2</td>
<td>FPC-Cable</td>
<td>OK</td>
</tr>
</tbody>
</table>

`racadm getsensorinfo`

Sensor Type : POWER
### Sensor Name: TEMPERATURE

<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Status</th>
<th>Reading</th>
<th>lc</th>
<th>uc</th>
<th>Inc [R/W]</th>
<th>Unc [R/W]</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS1 Status</td>
<td>Present</td>
<td>AC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Board Inlet Temp</td>
<td>Ok</td>
<td>20 C</td>
<td>-7 C</td>
<td>47 C</td>
<td>3 C [Y]</td>
<td>42 C [Y]</td>
</tr>
<tr>
<td>System Board Exhaust Temp</td>
<td>Ok</td>
<td>19 C</td>
<td>0 C</td>
<td>75 C</td>
<td>0 C [N]</td>
<td>70 C [N]</td>
</tr>
<tr>
<td>CPU1 Temp</td>
<td>Ok</td>
<td>59 C</td>
<td>3 C</td>
<td>97 C</td>
<td>8 C [N]</td>
<td>92 C [N]</td>
</tr>
</tbody>
</table>

### Sensor Type: FAN

<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Status</th>
<th>Reading</th>
<th>lc</th>
<th>uc</th>
<th>PWM %</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Board Fan1 RPM</td>
<td>Ok</td>
<td>5880 RPM</td>
<td>600 RPM</td>
<td>NA</td>
<td>21%</td>
</tr>
<tr>
<td>System Board Fan2 RPM</td>
<td>Ok</td>
<td>6000 RPM</td>
<td>600 RPM</td>
<td>NA</td>
<td>0%</td>
</tr>
<tr>
<td>System Board Fan3 RPM</td>
<td>Ok</td>
<td>5880 RPM</td>
<td>600 RPM</td>
<td>NA</td>
<td>0%</td>
</tr>
<tr>
<td>System Board Fan4 RPM</td>
<td>Ok</td>
<td>5880 RPM</td>
<td>600 RPM</td>
<td>NA</td>
<td>0%</td>
</tr>
<tr>
<td>System Board Fan5 RPM</td>
<td>Ok</td>
<td>5640 RPM</td>
<td>600 RPM</td>
<td>NA</td>
<td>144%</td>
</tr>
<tr>
<td>System Board Fan6 RPM</td>
<td>Ok</td>
<td>5880 RPM</td>
<td>600 RPM</td>
<td>NA</td>
<td>152%</td>
</tr>
</tbody>
</table>

### 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 VCORE PG</td>
<td>Ok</td>
<td>Good</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>System Board 3.3V PG</td>
<td>Ok</td>
<td>Good</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>System Board 5V AUX PG</td>
<td>Ok</td>
<td>Good</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>CPU1 M23 VPP PG</td>
<td>Ok</td>
<td>Good</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>System Board 1.05V PG</td>
<td>Ok</td>
<td>Good</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>CPU1 M23 VDDQ PG</td>
<td>Ok</td>
<td>Good</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>CPU1 M23 VTT PG</td>
<td>Ok</td>
<td>Good</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>System Board 5V SWITCH PG</td>
<td>Ok</td>
<td>Good</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>System Board VCCIO PG</td>
<td>Ok</td>
<td>Good</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>
## System Board 2.5V
- **Status**: Ok
- **Test Result**: Good
- **Value**: NA
- **Uncertainty**: NA

## CPU1 M01 VDDQ PG
- **Status**: Ok
- **Test Result**: Good
- **Value**: NA
- **Uncertainty**: NA

## System Board NDC PG
- **Status**: Ok
- **Test Result**: Good
- **Value**: NA
- **Uncertainty**: NA

## CPU1 M01 VPP PG
- **Status**: Ok
- **Test Result**: Good
- **Value**: NA
- **Uncertainty**: NA

## System Board 1.5V PG
- **Status**: Ok
- **Test Result**: Good
- **Value**: NA
- **Uncertainty**: NA

## System Board PS2 PG
- **Status**: Ok
- **Test Result**: Good
- **Value**: NA
- **Uncertainty**: NA

## System Board PS1 PG
- **Status**: Ok
- **Test Result**: Good
- **Value**: NA
- **Uncertainty**: NA

## System Board 1.5V AUX PG
- **Status**: Ok
- **Test Result**: Good
- **Value**: NA
- **Uncertainty**: NA

## CPU1 M01 VTT PG
- **Status**: Ok
- **Test Result**: Good
- **Value**: NA
- **Uncertainty**: NA

## PS1 Voltage 1 PG
- **Value**: 240 V
- **Uncertainty**: NA
- **Test Result**: Ok

## System Board DIMM PG
- **Status**: Ok
- **Test Result**: Good
- **Value**: NA
- **Uncertainty**: NA

### Sensor Type : CURRENT

<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Status</th>
<th>Reading</th>
<th>lc</th>
<th>uc</th>
<th>Inc [R/W]</th>
<th>unc [R/W]</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS1 Current</td>
<td>Ok</td>
<td>0.4 Amps</td>
<td>NA</td>
<td>NA</td>
<td>0 Amps [N]</td>
<td>0 Amps [N]</td>
</tr>
<tr>
<td>System Board Pwr Consumptions</td>
<td>Ok</td>
<td>56 Watts</td>
<td>NA</td>
<td>1386 Watts</td>
<td>0 Watts [N]</td>
<td>1260 Watts [N]</td>
</tr>
</tbody>
</table>

### Sensor Type : PROCESSOR

<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Status</th>
<th>State</th>
<th>lc</th>
<th>uc</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU1 Status</td>
<td>Ok</td>
<td>Presence Detected</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>CPU2 Status</td>
<td>N/A</td>
<td>Absent</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

### Sensor Type : MEMORY


### Sensor Type : Chassis Controller

<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Status</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chassis Controller</td>
<td>OK</td>
<td>OK</td>
</tr>
</tbody>
</table>

```
/tmp # vi idraclogs
4 23:09:39 idrac8 L4, S3 [2440]: sessionmanagement_dmmapping_thread() confd (2)
4 23:09:39 idrac8 L4, S3 [2440]: request.command is 13
4 23:09:39 idrac8 L4, S3 [10297]: AddMessageToLclogEI() Obtained MUT Flag
4 23:09:39 idrac8 L4, S3 [10297]: AddMessageToLclogEI : DCLCLWRAPCreateTLVLi
4 23:09:39 idrac8 L4, S3 [10297]: GetSledType() shmStatus 0 shmData0
4 23:09:39 idrac8 L5, S3 [10297]: RacadmcheckRSMStatus: This is RSM capable syst
4 23:09:40 idrac8 L4, S3 [10297]: ret is 0
```
Sensor Type : BATTERY

<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Status</th>
<th>Reading</th>
<th>lc</th>
<th>uc</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Board CMOS</td>
<td>Ok</td>
<td>Present</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Battery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERC1 ROMB Battery</td>
<td>Ok</td>
<td>Unknown</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>PERC2 ROMB Battery</td>
<td>Ok</td>
<td>Unknown</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Sensor Type : PERFORMANCE

<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Status</th>
<th>lc</th>
<th>uc</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Board Power</td>
<td>Ok</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Optimized</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sensor Type : INTRUSION

<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Intrusion</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Board Intrusion</td>
<td>Closed</td>
<td>Power ON</td>
</tr>
</tbody>
</table>

Sensor Type : REDUNDANCY

<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Status</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Board Fan Redundancy</td>
<td>Full Redundant</td>
<td>Fan</td>
</tr>
<tr>
<td>System Board PS Redundancy</td>
<td>Disabled</td>
<td>PSU</td>
</tr>
</tbody>
</table>

Sensor Type : SYSTEM PERFORMANCE

<table>
<thead>
<tr>
<th>Sensor Name</th>
<th>Status</th>
<th>Reading</th>
<th>lc</th>
<th>uc</th>
<th>Inc [R/W]</th>
<th>unc [R/W]</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Board CPU Usage</td>
<td>Non-Critical</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>0% [N]</td>
<td>99% [Y]</td>
</tr>
<tr>
<td>System Board IO Usage</td>
<td>Non-Critical</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>0% [N]</td>
<td>99% [Y]</td>
</tr>
<tr>
<td>System Board MEM Usage</td>
<td>Non-Critical</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>0% [N]</td>
<td>99% [Y]</td>
</tr>
<tr>
<td>System Board SYS Usage</td>
<td>Non-Critical</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>0% [N]</td>
<td>99% [Y]</td>
</tr>
</tbody>
</table>

getssninfo

Table 5. getssninfo

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

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

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

Synopsis

racadm getssninfo [-u <username>] [-A]

Input

• -u — displays only sessions associated with a specific user.
• -A — does not display headers or labels.

Example

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>58999</td>
<td>SSH</td>
<td>root</td>
<td>192.168.0.10</td>
<td>04/07/2016 12:00:34</td>
</tr>
</tbody>
</table>

Display the details of sessions without header

racadm getssninfo -A

"43584" "SSH" "root" "192.168.0.10" "04/07/2016 12:00:34"

getsvctag

Description

Displays the service tag of the host system.

Synopsis

racadm getsvctag [-m <module>]

Input

- -m <module> — Must be one of the following values:
  • chassis
  • server-<n> — where n = 1-16
  • server-<nx> — where n = 1-8; x = a, b, c, d (lower case)
  • switch-<n> — where n = 1-6

Output

Any system tag as applicable.

Example

- Display Service tag of Server in Slot 1
  racadm getsvctag -m server-1
- Display Service tag of all the components in the chassis
  racadm getsvctag

getsysinfo

Description

Displays information related to iDRAC, managed system, and watchdog configuration.
NOTE: The host name and OS Name fields in the getsysinfo output display accurate information only if the 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 the Server Administrator is not installed on the managed system.

Synopsis

```
```

Input

- `-4` — Displays IPv4 settings
- `-6` — Displays IPv6 settings
- `-c` — Displays common settings
- `-d` — Displays iDRAC information
- `-A` — Eliminates the printing of headers or labels

Output

```
RAC Information:
RAC Date/Time           = Thu Sep  3 17:25:06 2015
Firmware Version        = 2.20.20.20
Firmware Build          = 41
Last Firmware Update    = 09/02/2015 22:18:35
Hardware Version        = 0.01
MAC Address             = B8:2A:72:FC:4F:B0

Common settings:
Register DNS RAC Name   = 1
DNS RAC Name            = ipmierrata
Current DNS Domain      = sha512.com
Domain Name from DHCP   = Disabled

IPv4 settings:
Enabled                 = 1
Current IP Address      = 10.94.195.33
Current IP Gateway      = 10.94.195.1
Current IP Netmask      = 255.255.255.0
DHCP Enabled            = 1
Current DNS Server 1    = 10.94.192.67
Current DNS Server 2    = 0.0.0.0
DNS Servers from DHCP   = Disabled

IPv6 settings:
Enabled                 = 1
Current IP Address 1    = 2011:de11:bdc:195::16e/64
Current IP Gateway      = fe80::21c:23ff:fe6a:1106
Autoconfig              = 1
Link Local IP Address   = fe80::ba2a:72ff:fe0c:4fb0/64
Current IP Address 2    = ::
Current IP Address 3    = ::
Current IP Address 4    = ::
Current IP Address 5    = ::
Current IP Address 6    = ::
Current IP Address 7    = ::
Current IP Address 8    = ::
Current IP Address 9    = ::
Current IP Address 10   = ::
Current IP Address 11   = ::
Current IP Address 12   = ::
Current IP Address 13   = ::
Current IP Address 14   = ::
Current IP Address 15   = ::
DNS Servers from DHCPv6 = Disabled
Current DNS Server 1    = 2011:de11:bdc:192::67/64
Current DNS Server 2    = ::
```
System Information:
- System Model = PowerEdge R630
- System Revision = 1
- System BIOS Version = 1.3.6
- Service Tag = 62T3232
- Express Svc Code = 13230477902
- Host Name = WIN-2TA05N3JSLD
- OS Name = Microsoft Windows Server 2008 R2, Enterprise x64 Edition
- OS Version = Version 6.1 (Build 7601 : Service Pack 1) (x64) Server Full In
- Power Status = OFF
- Fresh Air Capable = Yes

Example
- Display system information
  racadm getsysinfo -c
- Display iDRAC information
  racadm getsysinfo -d
- Display IPv4 details without header
  racadm getsysinfo -A

"RAC IPv4 Information:"
"1"
"10.94.195.33"
"10.94.195.1"
"255.255.255.0"
"1"
"10.94.192.67"
"0.0.0.0"
"1"

gettracelog

Description
Lists all the trace login entries of iDRAC.

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

Input
- -i — Displays the number of entries in iDRAC trace log.
- --more — Displays one screen at a time and prompts the user to continue (similar to the UNIX more command).
- -c — Specifies the number of records to display.
- -s — Specifies the starting record to display.

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 starts. After the system starts, the system’s timestamp is used.

Example
- Display entire log
  racadm gettracelog
- Display number of records in log
  racadm gettracelog -i
  Total Records: 228
getversion

**Description**
Displays the current software version, model and generation information, and whether the target device can be updated.

**Synopsis**
- `racadm getversion`
- `racadm getversion [-b | -c | -i]`
- `racadm getversion [-f <filter>]`

**Input**
- `-c` — Displays the server’s current CPLD version.
- `-b` — Displays the server’s current BIOS version.
- `-i` — Displays the server’s current IDSDM version.
- `-f <filter>` — Filters the components and must be one of the following values:
  - `bios`: BIOS
  - `idrac`: iDRAC
  - `lc`: Lifecycle Controller
  - `idsdm`: SD card

```
racadm getversion -c
```

<table>
<thead>
<tr>
<th>&lt;Server&gt;</th>
<th>&lt;CPLD Version&gt;</th>
<th>&lt;Blade Type&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>server-1</td>
<td>1.0.5</td>
<td>PowerEdgeM520</td>
</tr>
<tr>
<td>server-2</td>
<td>1.0.3</td>
<td>PowerEdgeM610x</td>
</tr>
<tr>
<td>server-4</td>
<td>1.0.0</td>
<td>PowerEdgeM710HD</td>
</tr>
<tr>
<td>server-5</td>
<td>1.0.3</td>
<td>PowerEdgeM710</td>
</tr>
<tr>
<td>server-7</td>
<td>1.0.6</td>
<td>PowerEdgeM620</td>
</tr>
<tr>
<td>server-9</td>
<td>1.0.5</td>
<td>PowerEdgeM520</td>
</tr>
</tbody>
</table>

```
racadm getversion
Bios Version = 2.0.18
iDRAC Version = 2.00.00.00
Lifecycle Controller Version = 2.00.00.00
```

```
racadm getversion -b
```

<table>
<thead>
<tr>
<th>&lt;Server&gt;</th>
<th>&lt;BIOS Version&gt;</th>
<th>&lt;Blade Type&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>server-1</td>
<td>1.6.0</td>
<td>PowerEdgeM520</td>
</tr>
<tr>
<td>server-2</td>
<td>6.3.0</td>
<td>PowerEdgeM610x</td>
</tr>
<tr>
<td>server-4</td>
<td>7.0.0</td>
<td>PowerEdgeM710HD</td>
</tr>
<tr>
<td>server-5</td>
<td>6.3.0</td>
<td>PowerEdgeM710</td>
</tr>
<tr>
<td>server-7</td>
<td>1.7.1</td>
<td>PowerEdgeM620</td>
</tr>
<tr>
<td>server-9</td>
<td>1.7.1</td>
<td>PowerEdgeM520</td>
</tr>
</tbody>
</table>
### hwinventory

**Description**

Allows you to display or export current internal hardware inventory or shipped hardware inventory by device.

**NOTE:** iDRAC supports a maximum of 12 parallel sessions of hardware inventory.

**Synopsis**

- `racadm hwinventory`
- `racadm hwinventory NIC|FC`
- `racadm hwinventory <FQDD>`
- `racadm hwinventory export -f <filename> -u <username> -p <password> -l <CIFS or NFS share>`

**Input**

- `<FQDD>` — Specifies the FQDD of the target device.
  - `FQDD` — NIC.Slot.1–2
  - `-f` — Exported Hardware Inventory filename.
  - `-u` — Username of the remote share to where the file must be exported. Specify user name in a domain as `domain/username`
  - `-p` — Password for the remote share to where the file must be exported.
  - `-l` — Network share location to where the Hardware Inventory must be exported.

**Examples**

- To get the list of NIC FQDDs, type the following command:

  `racadm hwinventory nic`

  ```
  NIC.Slot.2-1-1:Emulex OCEl4102-U1-D - 00:90:FA:4C:FE:C2
  PartitionCapable: 1

  NIC.Slot.2-1-2:Emulex OCEl4102-U1-D - 00:90:FA:4C:FE:C3
  PartitionCapable: 2

  NIC.Slot.2-1-3:Emulex OCEl4102-U1-D - 00:90:FA:4C:FE:C4
  PartitionCapable: 3

  NIC.Slot.2-1-4:Emulex OCEl4102-U1-D - 00:90:FA:4C:FE:C5
  PartitionCapable: 4
  ```

- To display the statistics for the NIC FQDD, type the following command:

  `$racadm hwinventory <NIC_FQDD>`

  ```
  Total RDMA Packets Received: 0
  Total RDMA Packets Transmitted: 0
  ```
| Total RDMA Bytes Transmitted: | 0 |
| Total RDMA Bytes Received: | 0 |
| Total RDMA Transmitted ReadRequest Packets: | 0 |
| Total RDMA Transmitted Send Packets: | 0 |
| Total RDMA Transmitted Write Packets: | 0 |
| Total RDMA Protocol Errors: | 0 |
| Total RDMA Protection Errors: | 0 |

- To get the complete details for NIC.Integrated.1-4-1, type the following command:

  racadm hwinventory NIC.Integrated.1-4-1

Device Description: Integrated NIC 1 Port 4 Partition 1

PCI Vendor ID: 14e4
PCI Sub Vendor ID: 1028
PCI Device ID: 165F
PCI Sub Device ID: 1f5b
Current MAC Address: 74:86:7A:D6:E0:EF
Permanent MAC Address: 74:86:7A:D6:E0:EF
Virtual iSCSI MAC Address: Unavailable
Permanent iSCSI MAC Address: Unavailable
Virtual FIP MAC Address: Unavailable
Permanent FIP MAC Address: Unavailable
Permanent FCoE MAC Address: Unavailable
Slot Type: Not Applicable
Data Bus Width: Unknown
Slot Length: Not Applicable
Bus Number: 2
DeviceNumber: 0
Function Number: 1
Last Update Time: 20140508190902.000000+000
Last System Inventory Time: 20140515163940.000000+000
ProductName: BRCM GbE 4P 5720-t rNDC
WWN: Unavailable
VirtWWN: Unavailable
WWPN: Unavailable
VirtWWPN: Unavailable
Family Version: 7.8.16
Controller BIOS Version: 1.32
EFI Version: 16.2.4
Max Bandwidth: 0
Min Bandwidth: 0
FCoE WWNN: Vendor Name: Broadcom Corp
Number of PCI-e Functions Supported per Port: 1
Number of PCI-e Functions Currently Enabled per Port: 1
Family Driver Version: Unavailable
Protocol: 1
Link Duplex: Not Applicable
Link Speed: Not Applicable
Auto Negotiated: Disabled
Transmit Flow Control: Off
Receive Flow Control: Off
Media Type: Unavailable
NIC Mode: Disabled
FCoE Offload Mode: Disabled
iSCSI Offload Mode: Disabled
Max Number of IOs per session supported: 0
Number of Max LOGINs per port: 0
Max Number of exchanges: 0
Max NPIV WWN per port: 0
Number of Targets Supported: 0
Max Number of outstanding commands supported across all sessions: 0
Flex Addressing: Capable
UEFI: Capable
iSCSI Offload: Not Capable
iSCSI Boot: Capable
TCP OffloadEngine: Not Capable
FCoE: Not Capable
FCoE Boot: Not Capable
PXE Boot: Capable
SRIOV: Not Capable
Wake on LAN: Capable
Network Management Pass Through: Capable
OS2BMC PassThrough: Capable
Energy Efficient Ethernet: Capable
On Chip Thermal Sensor: Capable
NPar: Not Capable
Remote PHY: Not Capable
Feature Licensing: Not Capable
IPSec Offload: Not Capable
MAC Sec: Not Capable
RDMA: Not Capable
Enhanced Transmission Selection: Not Capable
Priority Flow Control: Not Capable
DCB Exchange Protocol: Not Capable
Congestion Notification: Not Capable
VEB-VEPA Single Channel: Not Capable
VEB-VEPA Multi Channel: Not Capable
EVB: Not Capable
BPE: Not Capable
Open Flow: Not Capable
Partition WOL Support: Not Capable
Virtual Link Control: Not Capable
Partition RX Flow Control: Not Capable
Partition TX Flow Control: Not Capable
TX Bandwidth Control Maximum: Not Capable
TX Bandwidth Control Minimum: Not Capable

• To export the inventory to a remote CIFS share, type the following command:
  racadm hwinventory export -f Myinventory.xml -u admin -p xxx 
  -l //1.2.3.4/share

• To export the inventory to a remote NFS share, type the following command:
  racadm hwinventory export -f Myinventory.xml -u admin -p xxx 
  -l 1.2.3.4:/share

• To export the inventory to local file system using local Racadm, type the following command:
  racadm hwinventory export -f Myinventory.xml

• To display the Standard hardware inventory verbose description for the FC.Slot.2–1, type the following command:
  racadm hwinventory FC.Slot.2-1

<table>
<thead>
<tr>
<th>PCI Vendor ID:</th>
<th>1077</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCI Sub Vendor ID:</td>
<td>1077</td>
</tr>
<tr>
<td>PCI Device ID:</td>
<td>2532</td>
</tr>
<tr>
<td>PCI Sub Device ID:</td>
<td>015c</td>
</tr>
<tr>
<td>PCI Bus:</td>
<td>67</td>
</tr>
<tr>
<td>PCI Device:</td>
<td></td>
</tr>
<tr>
<td>PCI Function:</td>
<td>0</td>
</tr>
<tr>
<td>Vendor Name:</td>
<td>Unavailable</td>
</tr>
<tr>
<td>Device Name:</td>
<td>QLogic QLE2560 8Gb Fibre Channel Adapter - 21000024FF089D8A</td>
</tr>
<tr>
<td>WWN:</td>
<td>20:00:00:24:FF:08:9D:8A</td>
</tr>
<tr>
<td>VirtWWN:</td>
<td>20:00:00:24:FF:08:9D:8A</td>
</tr>
<tr>
<td>WWPN:</td>
<td>21:00:00:24:FF:08:9D:8A</td>
</tr>
<tr>
<td>VirtWWPN:</td>
<td>21:00:00:24:FF:08:9D:8A</td>
</tr>
<tr>
<td>Chip Type:</td>
<td>ISP2532</td>
</tr>
<tr>
<td>Family Version:</td>
<td>02.57.14</td>
</tr>
<tr>
<td>EFI Version:</td>
<td>2.34</td>
</tr>
</tbody>
</table>
OS Driver Version: Unavailable
First FC Target WWPN: 50:06:01:60:44:60:28:8C
First FC Target LUN: 0
Second FC Target WWPN: 00:00:00:00:00:00:00:00
Second FC Target LUN: 0
Hard Zone Address: 0
Hard Zone Enable: Disabled
FC Tape Enable: Disabled
Loop reset Delay: 5
Frame Payload Size: 2048
Fabric Login Retry Count: 0
Fabric Login Timeout: 0
Port Login Retry Count: 8
Port Login Timeout: 3000
Port Down Retry Count: 45
Port Down Timeout: 0
Link Down Timeout: 45000
Port Number: 1
Port Speed: 0
No capabilities found for FQDD "FC.Slot.2-1"
/admin1-> racadm hwinventory FC.Slot.3-1
PCI Vendor ID: 1077
PCI Sub Vendor ID: 1077
PCI Device ID: 2031
PCI Sub Device ID: 0256
PCI Bus: 4
PCI Device: 0
PCI Function: 0
Vendor Name: QLogic
Device Name: QLogic QLE2660 16Gb FC Adapter - 2001000E1E091075
WWN: 20:00:00:0E:1E:09:10:75
VirtWWN: 20:00:00:0E:1E:09:10:75
WWPN: 20:01:00:0E:1E:09:10:75
VirtWWPN: 20:01:00:0E:1E:09:10:75
Chip Type: 8324, Rev. 02
Family Version: 02.00.84
EFI Version: 5.30
OS Driver Version: 9.1.10.27
First FC Target WWPN: 00:00:00:00:00:00:00:00
First FC Target LUN: 0
Second FC Target WWPN: 00:00:00:00:00:00:00:00
Second FC Target LUN: 0
Hard Zone Address: 0
Hard Zone Enable: Disabled
FC Tape Enable: Disabled
Loop reset Delay: 5
Frame Payload Size: 2048
Fabric Login Retry Count: 0
Fabric Login Timeout: 0
Port Login Retry Count: 8
Port Login Timeout: 3000
Port Down Retry Count: 30
Port Down Timeout: 0
Link Down Timeout: 30000
Port Number: 1
Port Speed: 0
Max Number of IOs per connection supported: 9
Maximum number of Logins per port: 8
Maximum number of exchanges: 9
Maximum NPIV per port: 1
Maximum number of FC Targets supported: 8
Maximum number of outstanding commands across all connections: 9
Flex Addressing: Capable
UEFI: Capable
FC Start: Capable
On Chip Thermal Sensor: Capable
Feature Licensing: Not Capable
**ifconfig**

**Description**
Displays the contents of the network interface table.

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

**Synopsis**
racadm ifconfig

**Input**
N/A

**Example**
$ racadm ifconfig

<table>
<thead>
<tr>
<th>Interface</th>
<th>Link Encap</th>
<th>HW Address</th>
<th>inet Addr</th>
<th>Broadcast</th>
<th>Mask</th>
<th>Up</th>
<th>Broadcast</th>
<th>Running</th>
<th>Multicast</th>
<th>MTU</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>eth0</td>
<td>Ethernet</td>
<td>00:1D:09:FF:DA:23</td>
<td>192.168.0.0</td>
<td>192.168.0.255</td>
<td>255.255.255.0</td>
<td>UP</td>
<td>RUNNING</td>
<td>MULTICAST</td>
<td>1500</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**inlettemphistory**

**Description**
Displays the average and the peak temperatures during the last hour, day, week, month, or year. Also Exports the inlet temperature history data file. The file can be exported to a remote file share, local file system, or the management station.

**NOTE:** For FM120x4 systems, this subcommand provides the historical data for system board temperature.

**Synopsis**

- racadm inlettemphistory export -f <filename> -t <type> [-u <username of the network share>] [-p <password for the remote share>] [-i <network share location>]
- racadm inlettemphistory get

**Input**

- **-f** — Exports inlet temperature history filename. The maximum length of this parameter is 64 characters.
  
  **NOTE:** If a file with the specified filename exists, then the older file is replaced with the new history file.

- **-u** — User name of the remote share to export the file. Specify user name in a domain as domain or username.

- **-p** — Password for the remote share to where the file must be exported.

- **-l** — Network share location to where the inlet temperature history must be exported. The maximum length of this parameter is 256 characters.

  **NOTE:** Export to an IPv6 NFS share is not supported.

- **-t** — Specifies the exported file type. Valid values are xml and csv. These values are case-insensitive.

  **NOTE:** From firmware RACADM, only export to a remote share is supported. The behavior of remote share is not defined when the path specified (-l) contains special characters.

**Example**

- Export the log to a remote CIFS share.
  racadm inlettemphistory export -f Mylog.xml -u admin -p xxx -l //1.2.3.4/share -t xml

- Export the log to local file system using Local RACADM.
  racadm inlettemphistory export -f Mylog.xml -t xml
- Export the log to management station using Remote RACADM.
  `racadm -r 1.2.3.4 -u user -p xxx inlettemphistory export -f Mylog.csv -t csv`
- View the inlet temperature history.
  `racadm inlettemphistory get`

### Duration Above Warning Threshold as Percentage
- 0.0%

### Duration Above Critical Threshold as Percentage
- 0.0%

### Average Temperatures
- **Last Hour**: 23°C (73.4°F)
- **Last Day**: 24°C (75.2°F)
- **Last Week**: 24°C (77.0°F)
- **Last Month**: 25°C (77.0°F)
- **Last Year**: 23°C (73.4°F)

### Peak Temperatures
- **Last Hour**: 23°C (73.4°F) [At Wed, 30 May 2012 11:00:57]
- **Last Day**: 25°C (77.0°F) [At Tue, 29 May 2012 15:37:23]
- **Last Week**: 27°C (80.6°F) [At Fri, 25 May 2012 10:38:20]
- **Last Month**: 29°C (84.2°F) [At Wed, 16 May 2012 15:34:13]
- **Last Year**: 29°C (84.2°F) [At Wed, 16 May 2012 15:34:13]

---

### jobqueue

**Description**
Enables you to view and delete a job or jobs in the current Job Queue.

1. **NOTE:**
   - To run this subcommand, you must have the Server control privilege.
   - If an unexpected error message is displayed for any operation, ensure you delete some jobs in the jobqueue and retry the operation.
   - Use jobqueue create command after applying a pending device configuration. Else, you may see a job creation and deletion in the lcllog.
   - Multi-object Set commands using INI or XML files do NOT require a jobqueue create command; jobs will be automatically created by the Set command.

**Synopsis**

- **racadm jobqueue view** `-i<jobid>`
- **racadm jobqueue delete** `[-i<jobid>][--all]`
  where valid options are `-i` and `--all`.
- **racadm jobqueue create** `<fqdd> [-r <reboot type> ] [-s <start time> ] [-e <expiration time>]`
- **racadm jobqueue create** `<fqdd> [-r <reboot type> ] [-s <start time> ] [-e <expiration time>] [--realtime]`

**Input**

- `-i` — Specifies a job ID that is displayed or deleted.
  1. **NOTE:** The value JID_CLEARALL will force delete all the possible jobs in the queue.
- `--all` — The job IDs that are not applicable are deleted.
- `-fqdd` — Specifies an FQDD for which a job should be created.
- `-r <reboot type>` — Specifies a reboot type.
  - `none` — No Reboot Job. This option is the default value.
  - `pwrercycle` — Power cycle.
  - `graceful` — Graceful Reboot without forced shut down.
  - `forced` — Graceful Reboot with forced shut down.
• **start time** — Specifies a start time for job scheduled in the `yyyy/mm/dd/hh/mm/ss` format. `TIME_NOW` means immediate. Next Reboot means job is in scheduled state until the next manual restart.

• **expiry time** — Specifies expiry time for the job execution in the `yyyy/mm/dd/hh/mm/ss` format. The job must start by this time. `TIME_NA` means expiry time is not applicable.

• **--realtime** — Specifies the real time job.

> **NOTE:**

- **--realtime** is applicable for storage configuration commands run on systems with PERC 9 cards with firmware version 9.1 and later.
- `-r` option is not valid for real time configuration.

**Example**

- View jobs in the current job queue.
  
  `racadm jobqueue view`

- View status of a specific job ID.
  
  `racadm jobqueue view -i <JobID>`

- Issue configuration changes for a PERC controller then start a real time job to execute the changes.
  
  `racadm set RAID.Slot.3-1.RAIDdefaultWritePolicy WriteBack`
  
  `racadm set RAID.Slot.3-1.Name "Prod Workload"`
  
  `racadm jobqueue create RAID.Slot.3-1 --realtime`

- Delete all possible jobs from the current job queue.
  
  `racadm jobqueue delete --all`

- Delete a specific job from the current job queue.
  
  `racadm jobqueue delete -i <JobID>`

- To clear all the jobs in the job queue.
  
  `racadm jobqueue delete -i JID_CLEARALL`

- Create a Job for the provided FQDD and add to the job queue.
  
  `racadm jobqueue create NIC.Integrated.1-1 -r pwrcycle -s TIME_NOW -e 20120501100000`

- Create a real time configuration job for the specified RAID controller.
  
  `racadm jobqueue create RAID.Integrated.1-1 -s TIME_NOW --realTime`

**krbkeytabupload**

**Description**

Uploads a Kerberos keytab file to iDRAC.

To run this subcommand, you must have the Server Control privilege.

**Synopsis**

`racadm krbkeytabupload [-f <filename>]

**Input**

- `-f` — Specifies the filename of the keytab uploaded. If the file is not specified, the keytab file in the current directory is selected.

**Output**

When successful Kerberos Keytab successfully uploaded to the RAC message is displayed. If unsuccessful, appropriate error message is displayed.

**Example**

`racadm krbkeytabupload -f c:\keytab\krbkeytab.tab`
lclog

Description

Allows you to:

- Export the lifecycle log history. The log exports to remote or local share location.
- View the lifecycle log for a particular device or category
- Add comment to a record in lifecycle log
- Add a work note (an entry) in the lifecycle log
- View the status of a configuration job.

NOTE:

- When you run this command on Local RACADM, the data is available to RACADM as a USB partition and may display a pop-up message.
- While Lifecycle Controller is running for racadm commands, you cannot perform other operations which needs Lifecycle Controller Partition. If the Lifecycle Controller Partition is unreleased (because of improper closure of racadm command in the partition), then you must wait 20-35 minutes to clear the Lifecycle Controller Partition

Synopsis

racadm lclog view -i <number of records> -a <agent id> -c <category> -s <severity> -b <sub-category> -q <sequence no> -n <number of records> -r <start timestamp> -e <end timestamp>

racadm lclog comment edit –q <sequence number> -m <Text to be added>

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

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

racadm lclog viewconfigresult -j <job ID>

racadm lclog worknote add -m <text to be added>

Input

- -i — Displays the number of records present in the active log.
- -a — The agent ID used to filter the records. Only one agent ID is accepted. The value is case-insensitive. Valid Agent-ID values:
  - UEFI_SS_USC
  - CusOsUp
  - UEFI_Inventory
  - iDRAC
  - UEFI_DCS
  - SEL
  - RACLOG
  - DE
  - WSMAN
  - RACADM
  - iDRAC_GUI
- -c — The category used to filter the records. Provides multiple categories using a "\," as the delimiter. The value is case-insensitive. Valid category values:
  - System
  - Storage
  - Worknotes
  - Config
  - Updates
Audit

- **-b** — The subcategory used to filter the records. Provides multiple subcategories using a "" as the delimiter.
- **-q** — The sequence number from which the records must be displayed. Records older than this sequence number is displayed.

**NOTE:** This parameter input is an integer. If an alphanumeric input is provided, then invalid subcommand syntax error is displayed.

- **-n** — Specifies the n number of records that must be displayed. On Local RACADM, if this parameter is not specified, by default 100 logs are retrieved.
- **-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 quotation marks.
- **-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 quotation marks.
- **-f <filename>** — Specifies the file location and name where lifecycle log is exported.
- **-a <name>** — Specifies the FTP Server IP address or FQDN, user name, and password.
- **-l <location>** — Specifies the location of the network share or area on file system where lifecycle log is exported. Two types of network shares are supported:
  - SMB-mounted path: //<ipaddress or domain name>/<share_name>/<path to image>
  - NFS-mounted path: <ipaddress>:/<path to image>.
- **-u <user>** — Specifies the user name for accessing the FTP server, or Domain and user name for accessing network share location.
- **-p <password>** — Specifies the password for accessing the FTP server or share location.
- **-s** — The severity used to filter the records. Provide multiple severities using a "" as the delimiter. The value is case-insensitive. Valid Severity values:
  - Warning
  - Critical
  - Info
- **-m <Comment>** — User comment string for a record that must be inserted in the Lifecycle Controller log. This comment string must be less than 128 characters. The text must be specified within double quotation mark.

**NOTE:** HTML-specific characters may appear as escaped text.

- **-m <Worknote>** — Adds a worknote (an entry) in the Lifecycle log. This worknote must be less than 256 characters. The text must be specified within double quotation mark.

**NOTE:** HTML-specific characters may appear as escaped text.

**NOTE:** For **-m <worknote>** and **-m <comment>** options, you need test alert privilege.

- **--complete** — Export the complete Lifecycle log as a compressed file. The exported file will be of the type .xml.gz.
- **-j<Job ID>** — Specifies the Job ID.

**Example**

- Display the number of records present in the Lifecycle log.
  ```
  racadm lclog view -i
  ```
- Display the iDRAC agent idrac records, under the storage category and storage physical disk drive subcategory, with severity set to warning.
  ```
  racadm lclog view -a idrac -c storage -b pdr -s warning
  ```
- Display the records under storage and system categories with severities set to warning or critical.
  ```
  racadm lclog view -c storage,system -s warning,critical
  ```
- Display the records having severities set to warning or critical, starting from sequence number 4.
  ```
  racadm lclog view -s warning,critical -q 4
  ```
- Display 5 records starting from sequence number 20.
  ```
  racadm lclog 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 lclog view -r "2011-01-02 23:33:40" -e "2011-01-03 00:32:15"
  ```
- Display all the available records from the active Lifecycle log.
  racadm lclog view

  **NOTE:** If output is not returned when this command is used remotely, then retry increasing the remote RACADM timeout value. To increase the timeout value, run the command `racadm set idrac.Racadm.Timeout <value>`. Alternatively, you can retrieve few records.

- Add a comment to record number 5 in the Lifecycle log.
  racadm lclog comment edit -q 5 -m "This is a test comment."

- Add a worknote to the Lifecycle log.
  racadm lclog worknote add -m "This is a test worknote."

- Export the Lifecycle log to a remote CIFS share.
  racadm lclog export -f Mylog.xml -u admin -p xxx -l //192.168.0/share

- Export the complete Lifecycle log in gzip format to a remote CIFS share.
  racadm lclog export -f log.xml.gz -u admin -p xxx -l //192.168.0/share --complete

- Export the Lifecycle log to a remote NFS share.
  racadm lclog export -f Mylog.xml -l 192.168.0:/home/lclog_user

- Export the Lifecycle log to a local share using Local RACADM.
  racadm lclog export -f Mylog.xml

- Export the complete Lifecycle log in gzip format to a local share using Local RACADM.
  racadm lclog export -f log.xml.gz --complete

- Export the Lifecycle log lclog to a local share using Remote RACADM.
  racadm -r 192.168.0 -u admin -p xxx lclog export -f Mylog.xml

- Display the status of the specified Job ID with Lifecycle Controller.
  racadm lclog viewconfigresult -j JID_123456789012

---

**license**

**Description**

Manages the hardware licenses.

**Synopsis**

- racadm license view [-c <component>]
- racadm license import [-f <licensefile>] -l <location> -u <username> -p <password> -c <component> [-o]
- racadm license export -f <license file> [-l <location>] [-u <username>] [-p <password>] -e <ID> -c <component>
- racadm license delete -t <transaction ID> [-o]
- racadm license delete -e <entitlement ID> [-o]
- racadm license delete -c <component> [-o]
- racadm license replace -u <username> -p <password> -f <license file name> -l <NFS/CIFS_share> -t <transaction ID> [-o]

**Input**

- 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.
- -l <remote share location> — Network share location from where the license file must be imported. If the file is on a shared location, then -u <share user> and -p <share password> must be used.
- -f — Filename or path to the license file
- -e <ID> — Specifies the entitlement ID of the license file that must be exported
- `t <ID>` — Specifies the transaction ID.
- `-c <component>` — Specifies the component name on which the license is installed.
- `-o` — Overrides the End User License Agreement (EULA) warning and imports, replaces or deletes the license.

0. **NOTE:** Only a user with Server Control and Configure iDRAC privilege can run the import, delete, and replace commands.

0. **NOTE:** For export license, you need Login and Configure iDRAC privilege.

**Examples**

- View all License Information on System.
  ```bash
  $racadm license view
  iDRAC.Embedded.1
  Status               = OK
  Device               = iDRAC.Embedded.1
  Device Description   = iDRAC
  Unique Identifier    = H1VGF2S
  License #1
  Status               = OK
  Transaction ID       = 5
  License Description  = iDRAC Enterprise License
  License Type         = PERPETUAL
  Entitlement ID       = Q3XJmvox2dJVSuZemDehlrerd
  License Bound        = H1VGF2S
  Expiration           = Not Applicable
  ```

- Import a new license to a specific device in a known location.
  ```bash
  $racadm license import -f license.xml -l //shareip/sharename
  -u <share user> -p <share user password> -c idrac.embedded.1
  ```

- Import a license from a CIFS share to a device, in this case Embedded iDRAC.
  ```bash
  racadm license import -u admin -p xxx -f License.xml
  -l //192.168.0/licshare -c idrac.embedded.1
  ```

- Import a license from an NFS share to a device, in this case Embedded iDRAC.
  ```bash
  racadm license import -f Licen.xml -l 192.168.0:/share
  -c idrac.embedded.1
  ```

- Import a license by overriding the EULA warning.
  ```bash
  racadm license import -u admin -p passwd -f License.xml
  -l //192.168.0/licshare -c idrac.embedded.1 -o
  ```

- Import a license from the local file system using Local RACADM.
  ```bash
  racadm license import -f License.xml -c idrac.embedded.1
  ```

- Import a license from the local file system using Remote RACADM.
  ```bash
  racadm -r 192.168.0.1 -u admin -p xxx license import -f C:\Mylicdir\License.xml -c
  idrac.embedded.1
  ```

- Export a license file.
  ```bash
  racadm license export -f license.xml -l 192.168.0:/share -u uname -p xxx -c iDRAC.Embedded.1
  ```

  Instead of `-c`, you can use `-e <ID>` or `-t <ID>

  For Remote RACADM, if filename is not specified, the files are exported to the directory where RACADM is running.

- Export license to an NFS share using transaction ID, in this case transaction 27.
  ```bash
  racadm license export -f License.xml -l 192.168.0:/licshare
  -t 27
  ```

- Export license to a CIFS share specifying the entitlement ID, in this case abcdxyz.
  ```bash
  racadm license export -u admin -p passwd -f License.xml
  -l //192.168.0/licshare -e abcdxyz
  ```
• Export license to a CIFS share specifying the FQDD. While using the `-c` option and exporting a license from a device, more than one license file may be exported. Therefore if a filename is given, an index is appended to the end of the filename such as `LicenseFile0.xml`, `LicenseFile1.xml`. In this case, the device is Embedded iDRAC.

```
racadm license export -u admin -p xxx -f LicenseFile.xml -l //192.168.0/licshare -c idrac.embedded.1
```

• Delete licenses on a particular device, in this case Embedded iDRAC.

```
racadm license delete -c idrac.embedded.1
```

• Delete a license using entitlement ID, in this case `xYZabcdefg`.

```
racadm license delete -e xYZabcdefg
```

• Delete a license using transaction ID, in this case `2`.

```
racadm license delete -t 2
```

• Replace a license on a device with a license file on an NFS share using transaction ID. In this case, transaction `27`.

```
racadm license replace -f License.xml -l 192.168.0:/licshare -t 27
```

• Replace a license on a device with a license file on a CIFS share using transaction ID. In this case, transaction `27`.

```
racadm license replace -u admin -p xxx -f License.xml -l //192.168.0/licshare -t 27
```

---

**netstat**

**Description**
Display the routing table and network statistics.

**Synopsis**
```
racadm netstat
```

**Examples**

• To display the routing table and network statistics, type the following command:

```
$ racadm netstat
```

---

**nicstatistics**

**Description**
Displays the statistics for the NIC FQDD.

**Synopsis**
```
- racadm nicstatistics
- racadm nicstatistics <NIC FQDD>
- racadm hwinventory NIC.Integrated.1-1
```

**Examples**

• To display the statistics for the NIC FQDD, type the following command:

```
$ racadm nicstatistics <NIC FQDD>
```

```
Total RDMA Packets Received:            0
Total RDMA Packets Transmitted:            0
Total RDMA Bytes Transmitted:            0
Total RDMA Bytes Received:            0
Total RDMA Transmitted ReadRequest Packets:    0
Total RDMA Transmitted Send Packets:        0
Total RDMA Transmitted Write Packets:        0
Total RDMA Protocol Errors:            0
```
To display the statistics for the integrated NIC, type the following command:

```bash
$ racadm nicstatistics NIC.Integrated.1-1
```

- **Total Bytes Received:** 0
- **Total Bytes Transmitted:** 0
- **Total Unicast Bytes Received:** 0
- **Total Multicast Bytes Received:** 0
- **Total Broadcast Bytes Received:** 0
- **Total Unicast Bytes Transmitted:** 0

To get the network statistics, type the following command:

```bash
$ racadm nicstatistics
```

NIC.Slot.5-2-1 : QLogic CNA Gigabit Ethernet-B8:AC:6F:B3:BF:10
NIC.Slot.5-2-1 : QLogic CNA Gigabit Ethernet-B8:AC:6F:B3:BF:11
NIC.Slot.5-2-1 : QLogic CNA Gigabit Ethernet-B8:AC:6F:B3:BF:12
NIC.Slot.5-2-1 : QLogic CNA Gigabit Ethernet-B8:AC:6F:B3:BF:13
NIC.Slot.5-2-1 : QLogic CNA Gigabit Ethernet-B8:AC:6F:B3:BF:14

### ping

**Description**
Verifies if the destination IP address is reachable from iDRAC with the current routing-table contents. A destination IP address is required. Based on the current routing-table contents, an ICMP echo packet is sent to the destination IP address.

To run this subcommand, you must have the **Debug** privilege.

**Synopsis**

```bash
racadm ping <ipaddress>
```

**Input**

- `<ipaddress>` — The IP address of the remote endpoint to ping.

**Output**

```
PING 192.168.0 (192.168.0): 56 data bytes
64 bytes from 192.168.0: seq=0 ttl=64 time=4.121 ms
192.168.0 ping statistics
1 packets transmitted, 1 packets received, 0 percent packet loss
round-trip min/avg/max = 4.121/4.121/4.121 ms
```

### ping6

**Description**
Verifies if the destination IPv6 address is reachable from iDRAC or with the current routing-table contents. A destination IPv6 address is required. Based on the current routing-table contents, an ICMP echo packet is sent to the destination IPv6 address.

To run this subcommand, you must have **Debug** privilege.

**Synopsis**

```bash
racadm ping6 <ipv6address>
```

**Input**

- `<ipv6address>` — The IPv6 address of the remote endpoint to ping.

**Example**

```
Pinging 2011:de11:bdc:194::31 from 2011:de11:bdc:194::101 with 32 bytes of data:
  Reply from 2011:de11:bdc:194::31: time<1ms
```
RACADM Proxy

Description
On the PowerEdge FX2/FX2s systems, you can manage the compute sleds and CMC using the iDRAC’s RACADM Proxy feature that redirects commands from iDRAC to CMC. You can return the CMC response to local or remote RACADM to access the CMC configuration and reporting features without placing the CMC on the management network. The CMC configuration commands are supported through local proxy when local configuration is enabled on iDRAC.

NOTE: Local racadm and local racadm proxy runs with root user privilege.

Synopsis
Local RACADM proxy usage
racadm <CMC racadm subcommand> --proxy

Remote RACADM proxy usage
racadm <CMC racadm subcommand> -u <username> -p <password> -r <idrac-ip connected to cmc> --proxy
NOTE:

- The attribute `racadm getconfig -g cfgRactuning -o cfgRacTuneChassisMgmtAtServer` must be set as non-zero in CMC.
- The attribute `racadm get system.ChassisControl.ChassisManagementMonitoring` attribute must be enabled in iDRAC.
- `--proxy` must be entered at the end of the command.
- The root privilege is the default privilege for Local RACADM proxy.
- The user privilege in the Remote RACADM proxy for CMC maps to iDRAC privilege.

<table>
<thead>
<tr>
<th>Required CMC Privilege for an operation</th>
<th>Required iDrac Privilege for proxy operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMC Login User</td>
<td>Login</td>
</tr>
<tr>
<td>Chassis Configuration Administrator</td>
<td>Configure</td>
</tr>
<tr>
<td>User Configuration Administrator</td>
<td>Configure User</td>
</tr>
<tr>
<td>Clear Logs Administrator</td>
<td>Logs</td>
</tr>
<tr>
<td>Chassis Control Administrator</td>
<td>System Control</td>
</tr>
<tr>
<td>Server Administrator</td>
<td>System Control</td>
</tr>
<tr>
<td>Test Alert User</td>
<td>System Operations</td>
</tr>
<tr>
<td>Debug Command Administrator</td>
<td>Debug</td>
</tr>
<tr>
<td>Fabric x Administrator (where x is A, B, or C)</td>
<td>System Control</td>
</tr>
</tbody>
</table>

- When CMC is not placed on the network, the import, export, and file operation commands to CIFS, NFS, or FTP will fail.
- When the Remote or Local RACADM Proxy operation is in progress, if the iDRAC is reset, then the Proxy operation fails and the output is not displayed in Remote or Local RACADM.
- When `racadm getsystem.ChassisControl.ChassisManagementMonitoring` attribute is set to `monitor`, all the users including root users can only view the attribute. To configure, set the attribute to `monitor` and manage in CMC.

**Input**

- `-u` — Specifies the user name of the remote share that stores the catalog file.
- `-p` — Specifies the password of the remote share that stores the catalog file.
- `-r` — Specifies the iDRAC IP address connected to CMC.

**Example**

Local RACADM

```
racadm getractime --proxy
```

Remote RACADM

```
racadm getractime -u root -p xxx -r 192.168.0 getractime --proxy
```

**racdump**

**Description**

Provides a single command to get dump, status, and general iDRAC board information. To run this subcommand, you must have the Debug permission.

- General System/RAC Information
- Coredump Information
- Network Interface Statistics
**Synopsis**  
racadm racdump

**Input**  
N/A

**Example**

```plaintext
RAC Information:
RAC Date/Time       = Thu Jul  3 13:35:32 2014
Firmware Version    = 2.05.05.05
Firmware Build      = 12
Last Firmware Update= 07/02/2014 19:41:38
Hardware Version    = 0.01
MAC Address         = 18:03:73:F7:B7:CA

Common settings:
Register DNS RAC Name = 0
DNS RAC Name          = idrac
Current DNS Domain    =
Domain Name from DHCP = Disabled

IPv4 settings:
Enabled              = 1
Current IP Address   = 192.168.0.1
Current IP Gateway   = 192.168.0.1
Current IP Netmask   = 192.168.0.1
DHCP Enabled         = 0
Current DNS Server 1 = 0.0.0.0
Current DNS Server 2 = 0.0.0.0
DNS Servers from DHCP= Disabled

IPv6 settings:
Enabled              = 0
Current IP Address 1 = ::
Current IP Gateway   = ::
Autoconfig           = 1
Link Local IP Address= ::
Current IP Address 2 = ::
Current IP Address 3 = ::
Current IP Address 4 = ::
Current IP Address 5 = ::
Current IP Address 6 = ::
Current IP Address 7 = ::
Current IP Address 8 = ::
Current IP Address 9 = ::
Current IP Address 10= ::
Current IP Address 11= ::
Current IP Address 12= ::
Current IP Address 13= ::
Current IP Address 14= ::
Current IP Address 15= ::
DNS Servers from DHCPv6 = Disabled
Current DNS Server 1 = ::
Current DNS Server 2 = ::
```

System Information:
System Model = PowerEdge R720
System Revision = I
System BIOS Version = 2.0.18
Service Tag =
Express Svc Code =
Host Name = localhost.localdomain
OS Name =
OS Version =
Power Status = ON
Fresh Air Capable = No

Watchdog Information:
Recovery Action = None
Present countdown value = 478 seconds
Initial countdown value = 480 seconds

Embedded NIC MAC Addresses:
NIC.Integrated.1-3-1 Ethernet = 78:2B:CB:4B:C2:ED
NIC.Integrated.1-1-1 Ethernet = 78:2B:CB:4B:C2:EB

Coredump Information
There is no coredump currently available.

Network Interface Statistics
Kernel IPv6 routing table
<table>
<thead>
<tr>
<th>Destination</th>
<th>Metric Ref</th>
<th>Use Iface</th>
<th>Next Hop</th>
<th>Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>::1/128</td>
<td>::</td>
<td>lo</td>
<td>::</td>
<td>U</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>lo</td>
<td></td>
<td>U</td>
</tr>
<tr>
<td>::1/128</td>
<td>::</td>
<td>lo</td>
<td></td>
<td>U</td>
</tr>
<tr>
<td>256</td>
<td>0</td>
<td>lo</td>
<td></td>
<td>U</td>
</tr>
<tr>
<td>fe80::1a03:73ff:feff:b7ca/128</td>
<td>::</td>
<td>lo</td>
<td></td>
<td>U</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>lo</td>
<td></td>
<td>U</td>
</tr>
<tr>
<td>fe80::/64</td>
<td>::</td>
<td></td>
<td></td>
<td>U</td>
</tr>
<tr>
<td>256</td>
<td>0</td>
<td>eth1</td>
<td></td>
<td>U</td>
</tr>
<tr>
<td>ff00::/8</td>
<td>::</td>
<td></td>
<td></td>
<td>U</td>
</tr>
<tr>
<td>256</td>
<td>0</td>
<td>eth1</td>
<td></td>
<td>U</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 Window</th>
<th>irtt</th>
<th>Iface</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0.0.0</td>
<td>192.168.0.1</td>
<td>0.0.0.0</td>
<td>UG</td>
<td>0</td>
<td>0</td>
<td>bond0</td>
</tr>
<tr>
<td>192.168.0.1</td>
<td>0.0.0.0</td>
<td>192.168.0.1</td>
<td>U</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>192.168.0.1:53986</td>
<td>192.168.0.1:199</td>
<td>ESTABLISHED</td>
</tr>
<tr>
<td>tcp</td>
<td>0</td>
<td>0</td>
<td>192.168.0.1:53985</td>
<td>192.168.0.1:199</td>
<td>ESTABLISHED</td>
</tr>
<tr>
<td>tcp</td>
<td>0</td>
<td>0</td>
<td>192.168.0.1:199</td>
<td>192.168.0.1:53986</td>
<td>ESTABLISHED</td>
</tr>
<tr>
<td>tcp</td>
<td>0</td>
<td>0</td>
<td>192.168.0.1:199</td>
<td>192.168.0.1:53985</td>
<td>ESTABLISHED</td>
</tr>
</tbody>
</table>

Session Information
No active sessions currently exist.

Process Information

PID USER VSZ STAT COMMAND
racreset

Description
Resets iDRAC. The reset event is logged in the iDRAC log.

To run this subcommand, you must have the Configure iDRAC permission and configure user privilege.

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

Synopsis
racadm racreset soft
racadm racreset hard
racadm racreset soft -f
racadm racreset hard -f

Input
- \(-f\) — This option is used to force the reset.

Output
racadm racreset
RAC reset operation initiated successfully. It may take up to a minute for the RAC to come online again.

Example
- iDRAC reset
  racadm racreset

racresetcfg

Description
Deletes your current iDRAC configuration and resets iDRAC to the factory default settings. After reset, the default name and password are root and calvin, respectively, and the IP address is 192.168.0.120. Only for iDRAC Enterprise on Blade servers, IP address and the number of the slot the server inhabits in the chassis.
If you run `racresetcfg` from a network client (for example, a supported web browser, Telnet or SSH, or Remote RACADM), use the default IP address. The `racresetcfg` subcommand does not reset the `cfgDNSRacName` object.

To run this subcommand, you must have the Configure iDRAC privilege and configure user privilege.

1. **NOTE:** Certain firmware processes must be stopped and restarted to complete the reset to defaults. iDRAC becomes unresponsive for about 30 seconds while this operation completes.

### Synopsis

- `racadm racresetcfg`
  
  RAC reset operation initiated successfully. It may take several minutes for the RAC to come online again.

- `racadm racresetcfg -f`

### Input

- `-f` — Force `resetcfg`. If any vFlash partition creation or formatting is in progress, iDRAC returns a warning message. You can perform a force reset using this option.

### Example

- Reset the configuration on iDRAC.
  
  `racadm racresetcfg`
  
  The RAC configuration has initiated restoration to factory defaults.
  
  Wait up to a minute for this process to complete before accessing the RAC again.

- Reset when vFlash Partition creation is in progress.
  
  `racadm racresetcfg`
  
  A vFlash SD card partition operation is in progress. Resetting the iDRAC may corrupt the vFlash SD card. To force `racresetcfg`, use the `-f` flag.

### descriptionimage

**Description**

Connects, disconnects, or deploys a media file on a remote server. To run this subcommand, you must log in with virtual media privilege for iDRAC.

### Synopsis

- `racadm remotimage [-m <module> | -a]
  
- `racadm remotimage -d [-m <module> | -a]
  
- `racadm remotimage -s [-m <module> | -a]
  
- `racadm remotimage -c [-m <module> | -a] [-u <username> -p <password> -l <image_path>]
  
- `racadm remotimage -e [-m <module> | -a] [-u <username> -p <password> -l <image_path>]

### Input

- `-c` — Connect the image.
- `-d` — Disconnect image.
- `-l` — Image location on the network share; use single quotation marks around the location.
- `-s` — Display current status.

1. **NOTE:** Use a forward slash (/) when providing the image location. If backward slash (\) is used, override the backward slash for the command to run successfully.

   For example:
   
   ```console
   racadm remotimage -c -u user -p xxx -l /\192.168.0.2/\CommonShare/diskette
   ```
NOTE: The following options only apply to connect and deploy actions

- **-u** — Username.
  
  User name to access the network share. For domain users, you can use the following formats:
  
  - domain\user
  - domain\user
  - user@domain

- **-p** — Password to access the network share.

**Example**

- Configure a Remote image.

  ```bash
  racadm remoteimage -c -u "user" -p "xxx" -l //shrloc/foo.iso
  Remote Image is now Configured
  ```

- Disable Remote File Sharing.

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

- Check Remote File Share status.

  ```bash
  racadm remoteimage -s
  Remote File Share is Enabled
  UserName
  Password
  ShareName //192.168.0/xxxx/dtk_3.3_73/Linux.iso
  ```

- Deploy a remote image on iDRAC CIFS Share.

  ```bash
  racadm remoteimage -c -u admin -p xxx -l //192.168.0/dev/floppy.img
  ```

- Deploy a remote image on iDRAC NFS Share.

  ```bash
  racadm remoteimage -c -u admin -p xxx -l //192.168.0/dev/floppy.img'
  ```

### rollback

**Description**

Allows you to roll back the firmware to an earlier version.

**Synopsis**

```bash
racadm rollback <FQDD> [--reboot]
```

**Input**

- `<FQDD>`: Specify the FQDD of the device for which the rollback is required.
- `--reboot`: Performs a graceful system reboot after the BIOS firmware rollback.

**Example**

- To perform BIOS firmware rollback:

  ```bash
  racadm rollback iDRAC.Embedded.1-1
  RAC1056: Rollback operation initiated successfully.
  ```

- To perform a graceful system reboot after BIOS firmware rollback:

  ```bash
  racadm rollback BIOS.Setup.1-1 --reboot
  ```

### sensorsettings

**Description**

Allows you to perform threshold settings of the sensor.

To run this subcommand, you must have **Configure iDRAC** privilege.
NOTE: An error message is displayed when the following is performed:
- A set operation is performed on an unsupported FQDD.
- Out of range settings is entered.
- Invalid sensor FQDD is entered.
- Invalid threshold level filter is entered.

Synopsis

```
racadm sensorsettings set <FQDD> -level Min <value>
```

Input

- `<FQDD>` — Sensor or corresponding sensor FQDD which needs a threshold configuration. Run the command, `racadm getsensorinfo` to view the sensor FQDD. The R/W field in the output getsensorinfo indicates if the sensor thresholds can be configured. Replace the `<FQDD>` field with the corresponding sensor FQDD that needs a threshold configuration.
- `-level` — threshold level for the sensor setting. Values are Max or Min.

Examples

To set the minimum noncritical threshold level for a power sensor type.

```
racadm sensorsettings set iDRAC.Embedded.1#SystemBoardCPUUsage -level Max 95
```

NOTE: The entered value must be lesser or higher than the sensor critical threshold limit.

**serveraction**

**Description**

Enables you to perform power management operations on the blade system.

To run this subcommand, you must have the Execute Server Control Commands permission.

**Synopsis**

```
racadm serveraction <action> -f
```

**Input**

- `<action>` — Specifies the power management operation to perform. The options are:
  - `hardreset` — Performs a force reset (reboot) operation on the managed system.
  - `powercycle` — Performs 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` — Powers down the managed system.
  - `powerup` — Powers up the managed system.
  - `powerstatus` — Displays the current power status of the server (ON or OFF).
  - `graceshutdown` — Performs a graceful shutdown of the server. If the operating system on the server cannot shut down completely, then this operation is not performed.
  - `nmi` — Generates the Non-masking interrupt (NMI) to halt the system operation. The NMI sends a high-level interrupt to the operating system, which causes the system to halt the operation to allow critical diagnostic or troubleshooting activities.

NOTE:

The halt system operation does not occur on systems running the Linux operating system.

- `-f` — Force the server power management operation.

  This option is applicable only for the PowerEdge-VRTX platform. It is used with `powerdown`, `powercycle`, and `hardreset` options.

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

**Output**

Displays an error message if the requested operation is not completed, or a success message if the operation is completed.
Get Power Status on iDRAC

racadm serveraction powerstatus
Server Power Status: ON

racadm serveraction powercycle
Server power operation successful

set

Description

Modifies the value of configuration objects on a component. The `set` sub-command has two forms:

- The modification of a single object to a new value specified in the command line.
- The modification of multiple objects to new values using a configuration file.

It supports multi-object value import from two configuration file formats.

- INI format — The INI format files can be imported from a local file only
- Server Configuration Profile XML format — XML format files can be imported from a local file, from an NFS network share or from a CIFS network share.

**NOTE:** To run the `set` sub-command for Server Configuration Profile XML files, use the Lifecycle Controller version 1.1 or later.

Depending on the type of configuration object being modified, the new values could be applied immediately (in “real-time”) or require staging and a reboot of the system to apply the new values. The following components support either real-time or staged application of new values:

- iDRAC with Lifecycle Controller
- PERC RAID controllers

**NOTE:** Use PERC RAID controllers with firmware version 9.1 or later. The real-time support is provided only while performing hardware RAID configuration.

The following components require staging and system reboot for application of new values:

- BIOS
- Other PERC RAID controllers — For software RAID configuration
- Networking devices – Ethernet and Fibre Channel

**NOTE:**

- To modify the value of staged objects such as BIOS or NIC, commit and reboot job creation must be used to apply the pending values. When single object `set` operations are used to stage value modification, use the `jobqueue` command to schedule a job to reboot the server and apply the new values. For staged multi-object `set` operations using ini and xml configuration files, a job will automatically be created by the `set` command; use the `-b`, `-w` and `-s` options to specify how the staged reboot will be performed. For more information, see `jobqueue`.
- To run this subcommand for configuration xml file type, the Lifecycle Controller version 1.1 or later is required.

Synopsis

**Single-object Set**

- `racadm set <FQDD Alias>.<group> <value>`
- `racadm get <FQDD Alias>.<group>.<object> <value>`
- `racadm get <FQDD Alias>.<group>.<index>.<object> <value>`
- `racadm get <FQDD Alias>.<index>.<group>.<index>.<object> <value>`

**Multi-object Set**

- `racadm set -f <filename> [-t ini] [--continue]`
- `racadm set -f <filename> -t xml -l <NFS share> [--preview] [--continue]`
- `racadm set -f <filename> -t xml -l <NFS share> -c <FQDD>[,<FQDD>*]`
racadm set -f <filename> -t xml -u <username> -p <password> -l <CIFS share> [--preview] [--continue]

racadm set -f <filename> -t xml -u <username> -p <password> -l <CIFS share> -c <FQDD>[,<FQDD>*]

Input

- **<FQDD Alias>**
  Examples for FQDDs:
  - System.Power
  - System.Power.Supply
  - System.Location
  - LifecycleController.LCAttributes
  - System.LCD
  - iDRAC.Serial

- **<group>** — Specifies the group containing the object that must be written.
- **<object>** — Specifies the object name of the value that must be written.
- **<index>** — This option is specified where FQDD Aliases or Groups must be indexed.
- **-f <filename>** — Enables set to configure the device from a specified file. This option is not supported in the Firmware RACADM interface.
- **--continue** — This option is used with –f only and is applicable for only for INI file operation. If a multi-object Set is unsuccessful for a <group>, then Set continues with the next <group> in the file. If this option is not used, then Set stops when it is unsuccessful for a particular <group>. After the unsuccessful <group>, the remaining <group>s are not configured.

NOTE: This option is applicable only for INI file operation.

- **-u** — Specifies user name of the CIFS remote share from which the file must be imported
- **-p** — Specifies password for the remote CIFS share from which the file must be imported.
- **-l** — Specifies network share location from where the file must be imported.
- **-t** — Specifies the file type to be imported. Valid values are xml and INI. INI files can only be imported from a local file. XML imports the Server Configuration Profile in XML format either from a local or network share file.

NOTE: To import or export Server Configuration Profile.xml, use the Lifecycle Controller version 1.1 or later.

Staging and reboot control options

The following options control when and how system reboots are performed when using the –f option. As noted above, some FQDDs require a system reboot to apply the new values; other FQDDs optionally support immediate application of new values. If the imported file contains ONLY immediate application-capable FQDDs such as iDRAC, do NOT use the –b option and the Set command will schedule a real-time job to immediately apply the new values.

NOTE: The –b, –w, –s, and --preview options are applicable only with –f option.

- **-b** — Specifies the type of shutdown for the system after a file import operation completes. The parameters are Graceful, Forced, and NoReboot for graceful shutdown, forced shutdown, and no reboot respectively. If –b is not specified, graceful shutdown is taken as the default except as noted above for files containing new values for immediate application-capable <FQDD>s.

NOTE: If the operating system is in use, then the graceful shutdown option may time out within 300 seconds. If this operation is unsuccessful, then retry with the force option.

- **-w** — Maximum time to wait for the graceful shutdown to occur. The value must be entered in seconds. Minimum accepted value is 300 seconds and the maximum accepted value is 3600 seconds. The default value is 1800 seconds.

- **-s** — Power state of the host when the import operation completes. The parameters are "On" for powered ON and "Off" for powered OFF. If this parameter is not specified, power ON is taken as default.

- **--preview** — Validates the configuration .xml file and view the status.
The --preview option provides the **Job ID** to verify the status of the file preview operation. The **Job ID** can be tracked by running the `racadm jobqueue view -I <JID>` command.

**NOTE:**
- The --preview option does not restart the system.
- The -b,-w options cannot be included with the --preview option.
- A scheduled job or pending configuration should not be running while using the --preview option.

- **-c** — Specifies the FQDD or list of FQDDs separated by ',' of the components for which the configurations should be imported. If this option is not specified, configuration related to all the components are imported.

**NOTE:** **To use the -c or --preview option, the minimum Lifecycle Controller version required is 1.2.**

**NOTE:** **On certain devices, importing the server configuration profile requires two imports to apply the configuration to all the devices. The first import of the profile enables hidden devices which are then configured with a second import. The devices that require two imports are as follows:**
- PERC S110 and PERC S130 controllers
- PCI slots in the system that are disabled in the BIOS

**Example**

**Single-object Set of real-time objects**

- Configure LCD String.
  ```bash
  $ racadm set system.lcd.LCDUserString test
  ```
- Configure iDRAC name.
  ```bash
  racadm set iDRAC.Info.Name idrac-server100
  ```

**Single-object Set of staged objects**

- Configure several BIOS settings, create a job to initiate application of new values, reboot the system, then wait for the job to complete.
  ```bash
  racadm set BIOS.SysProfileSettings.ProcTurboMode Disabled
  racadm set BIOS.ProcSettings.ProcVirtualization Enabled
  racadm set BIOS.ProcSettings.ControlledTurbo Enabled
  racadm jobqueue create BIOS.Setup.1-1 -r Graceful
  ```
- Make note of the Job ID output by the jobqueue command
- After reboot, wait for the job to complete by checking the job status
  ```bash
  racadm jobqueue view -i <Job ID>
  ```

**Multi-object Set of real-time objects**

- Configure the iDRAC using a local INI file.
  ```bash
  racadm set -f myidrac.ini
  ```
- Configure the iDRAC using a local Server Configuration Profile XML file containing only iDRAC settings.
  ```bash
  racadm set -f myidrac.xml -t xml
  ```
- Configure the iDRAC using a Server Configuration Profile XML file stored on an NFS share containing only iDRAC settings.
  ```bash
  racadm set -f myidrac.xml -t xml -l 10.1.2.3:/myshare
  ```
- Import a Server Configuration Profile from a CIFS share, using only the iDRAC component.
  ```bash
  racadm set -f file -t xml -u myuser -p mypassword -l //192.168.0/share -c iDRAC.Embedded.1
  ```

**Multi-object Set of staged objects**

- Configure a systems using a local Server Configuration Profile XML file containing a mix of real-time and staged objects; reboot the server gracefully with a wait time of ten minutes, leaving the server powered on after the reboot.
racadm set -f myfile.xml -t xml -b "graceful" -w 600 -s "on"

• Make note of the Job ID output by the Set command.
• After reboot, wait for the job to complete by checking the job status.
  racadm jobqueue view -i <Job ID>

• Configure a system using a local Server Configuration Profile XML file containing a mix of real-time and staged objects; postpone reboot until other operations have been completed.
  racadm set -f myfile.xml -t xml -b NoReboot

• Make note of the Job ID output by the Set command; because of the NoReboot option, the job will be pending until the server is rebooted
• Complete other operations, then perform a reboot
  racadm jobqueue view -i <Job ID>

• Verify the Server Configuration Profile XML file content located in a remote CIFS share.
  racadm set -f temp_Configuration_file -t xml -u Administrator -p Password -l //192.168.0/xyz -preview

setled

Description
Sets the state (blinking or not blinking) of the LED on the specified module.
To run this subcommand, you must have the Configure iDRAC permission.

Synopsis
racadm setled -l <ledState>

Input
• -l <ledState> — Specifies the LED state. The values are:
  • 0 — No Blinking
  • 1 — Blinking

Example
• From iDRAC stop LED from blinking.
  racadm setled -l 0
  RAC0908: System ID LED blink off.
• From iDRAC start LED to blink.
  racadm setled -l 1
  RAC0907: System ID LED blink on.

setniccfg

Description
Sets the iDRAC IP address for static and DHCP modes.
To run this subcommand, you must have the Configure iDRAC privilege.

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

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

- `d` — Enables DHCP for the NIC. It is enabled by default.
- `d6` — Enables AutoConfig for the NIC (default is disabled).
- `s` — Enables static IP settings. The IPv4 address, netmask, and gateway must be specified. Otherwise, the existing static settings are used. `<ipaddress>, <netmask>, and <gateway>` must be typed as dot-separated strings.
  
  ```
  racadm setniccfg -s 192.168.0.255.255.255.0 192.168.0
  ```
- `s6` — Enables static IPv6 settings. The IPv6 address, Prefix Length, and the IPv6 Gateway can be specified.
- `o` — Enable or disable NIC.

Example

- To Configure static IPv4 address for iDRAC NIC
  
  ```
  racadm setniccfg -s 192.168.0.255.255.255.0 192.168.0
  ```
  Static IP configuration enabled and modified successfully
- Configure DHCP mode for iDRAC IPv4
  
  ```
  racadm setniccfg -d
  ```
  DHCP is now ENABLED
- Configure DHCP mode for iDRAC IPv6
  
  ```
  racadm setniccfg -d6
  ```
  DHCP6 is now ENABLED

sshpkauth

Description

Enables you to upload and manage up to 4 different SSH public keys for each user. You can upload a key file or key text, view keys, or delete keys. This command has three mutually exclusive modes determined by the options — upload, view, and delete.

To run this subcommand, you must have Configure user privilege.

**NOTE:** CMC does not support DSA algorithm.

Synopsis

- `racadm sshpkauth -i <user_index> -k [<key_index> | all] -p <privilege> -t <PK_key_text>
- `racadm sshpkauth -i <user_index> -k [<key_index> | all] -p <privilege> -f <PK_key_text>
- `racadm sshpkauth -v -i <user_index> -k all|<key_index>
- `racadm sshpkauth -d -i <user_index> -k all|<key_index>

Input

- `-i <user_index>` — Index for the user.
- `-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 to 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.

**NOTE:** The -c option is not supported on Telnet or SSH or serial RACADM.

Example

- 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 AAAAB3NzaC1yc2EAAAAB1wAAAIEAzzy+k2nnpKgVEXGXIzo0sbR6JgA5YNbWs3ekoxXVfe3yjVpVc/5zrrr7XrwKrBJAJTqSw8Dg3Ir4n3vUaP+1PHmUvSmn55Ea6LHUs1AFqXmOd1Thdw1L2VLw/iRH1ZymUFnut8ggbFQggVZL8bsUaMq5Poo1V6h4isCNJU= 1024-bit RSA, converted from OpenSSH by xx_xx@xx.xx
  
  Key ID 2:
  
  Key ID 3:
  
  Key ID 4:

### sslcertdownload

**Description**

Downloads an SSL certificate from iDRAC to the client’s file system.

To run this subcommand, you must have the **Server Control** privilege.

**NOTE:** This subcommand is only supported on the remote interface(s).

**Synopsis**

```
racadm sslcertdownload -f <filename> -t <type>
```

**Input**

- `-f` — Specifies the target filename on local file system to download the certificate.
- `-t <type>` — Specifies the type of certificate to download, either the CA certificate for Directory Service or the server certificate.
  - `1` = server certificate
  - `2` = Active Directory

**Output**

Returns 0 when successful and non-zero number when unsuccessful.

**Example**

- Download server certificate:
  
  ```
  racadm -r 192.168.0 -u root -p xxx sslcertdownload -t 1 -f cert.txt
  ```

- Download Active Directory certificate:
  
  ```
  racadm -r 192.168.0 -u root -p xxx sslcertdownload -t 2 -f ad_cert.txt
  ```

**NOTE:** This command is not supported in the firmware RACADM interface as it is not a file system.

### sslcertupload

**Description**

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

To run this subcommand, you must have the **Server Control** privilege.

**Synopsis**

```
racadm sslcertupload -t <type> -f <filename> -p <passphrase> [-k <key file>]
```

**Input**

- `-t <type>` — Specifies the type of certificate to upload. The type of certificate must be:
  - `1` — server certificate

**Example**

- Download server certificate:
  
  ```
  racadm -r 192.168.0 -u root -p xxx sslcertupload -t 1 -f cert.txt
  ```

- Download Active Directory certificate:
  
  ```
  racadm -r 192.168.0 -u root -p xxx sslcertupload -t 2 -f ad_cert.txt
  ```

**NOTE:** This command is not supported in the firmware RACADM interface as it is not a file system.


- 2 — Active Directory
- 3 — Public Key Cryptography Standards (PKCS) format
- -f — Specifies the source filename in the local file system of the certificate uploaded.
- -k — Specifies optional source filename for private key when using type 6.
- -p — Pass phrase for decrypting the PKCS12 file uploaded.
- -k — Filename of the private key file while using type 6. The private key is generated when the CSR is generated. If the CSR is generated on another server, then it is necessary to upload the private key with the certificate.

Output

```
racadm -r 192.168.0.2 -u root -p xxx sslcertupload -t 2 -f cert.txt
```
Certificate successfully uploaded to the RAC.

Example

- Uploading a server certificate.
  ```
  racadm -r 192.168.0.2 -u root -p xxx sslcertupload -t 1 -f cert.txt
  ```
- Upload web server certificate and key
  ```
  racadm -r 192.168.0.2 -u root -p xxx sslcertupload -t 6 -f cert.txt -k key.txt
  ```
- Uploading Active Directory Certificate
  ```
  racadm -r 192.168.0.2 -u root -p xxx sslcertupload -t 2 -f ad_cert.txt
  ```

sslcertview

Description
Displays the SSL server or CA certificate that exists on iDRAC.

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

Input

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

NOTE: If a certificate is generated using comma ‘,’ as one of the parameters for the Organization Name, Common Name, Location Name, or State Name, then this command displays the partial name in the respective fields only up to the comma. The rest of the string is not displayed.

Output

```
racadm sslcertview -t 1
```

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>01</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Subject Information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country Code (CC)</td>
</tr>
<tr>
<td>State (S)</td>
</tr>
<tr>
<td>Locality (L)</td>
</tr>
<tr>
<td>Organization (O)</td>
</tr>
<tr>
<td>Organizational Unit (OU)</td>
</tr>
</tbody>
</table>
Common Name (CN) | iDRAC Default certificate
---|---
**Issuer Information:**
Country Code (CC) | US
State (S) | Texas
Locality (L) | Round Rock
Organization (O) | Dell Inc.
Organizational Unit (OU) | Remote Access Group
Common Name (CN) | iDRAC Default certificate
Valid From | Jul 7 23:54:19 2011 GMT
Valid To | Jun 4 23:54:19 2021 GMT

```shell
racadm sslcertview -t 1 -A
```

**sslcertdelete**

**Description**
Command to delete a custom signing certificate from iDRAC.
To run this subcommand, you must have the **Server Control** privilege.

**Synopsis**
racadm sslcertdelete -t <type>

**Input**
- `t` — Specifies the type of certificate to delete. The type of certificate is:
  - 3 — Custom signing certificate

**Output**
The following information is displayed:
- The custom signing certificate was deleted.
The iDRAC resets and may be offline temporarily.

**Example**

Use Remote RACADM to delete the custom signing certificate.

```
$ racadm -r 192.168.0 -u root -p xxx sslcertdelete -t 3
```

### sslcsrgen

**Description**

Generates and downloads a certificate signing request (CSR) file to the client’s local file system. The CSR can be used for creating a custom SSL certificate that can be used for SSL transactions on iDRAC.

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

**Synopsis**

- `racadm sslcsrgen -g`
- `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.
- The `-f` option is only supported on the remote interface(s).

**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**

- Display current status of CSR operation:
  
  `racadm sslcsrgen -s`
  
  or
  
  `racadm sslcsrgen -g -f c:\csr\csrtest.txt`

- Generate and download a CSR to local file system:
  
  `racadm -r 192.168.0.120 -u root -p calvin sslcsrgen -g -f csrtest.txt`

**NOTE:** Before a CSR can be generated, the CSR fields must be configured in the RACADM iDRAC.Security group. For example:

`racadm set iDRAC.security.commonname MyCompany`

**NOTE:** In Telnet or SSH console, you can only generate and not download the CSR file.

### sslkeyupload

**Description**

Uploads SSL key from the client to iDRAC.
To run this subcommand, you must have the **Server Control** privilege.

###Synopsis

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

###Input

- `-t` — Specifies the key to upload. The value is:
  - 1 — SSL key used to generate the server certificate.
- `-f` — Specifies the filename of the SSL key that must be uploaded.

###Output

If upload is successful, the message **SSL key successfully uploaded to the RAC** is displayed. If upload is unsuccessful, error message is displayed.

###Example

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

###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 run this subcommand, you must have the **Configure iDRAC** privilege.

####Synopsis

```bash
racadm sslresetcfg
```

####Input

N/A

####Example

```bash
racadm sslresetcfg
```

Certificate generated successfully and webserver restarted.

###storage

####Description

Allows you to run the commands to control storage arrays.

To run this subcommand for configuring the storage properties, you must have the server control permission.

####Synopsis

**Inventory**

- To view the help details for get command, run the following command:
  ```bash
  racadm storage help get
  ```
- To generate and view information about the inventory of storage root node, run the following command:
  ```bash
  racadm storage get status
  ```
- To generate and view information about the inventory of controllers, run the following command:
  ```bash
  racadm storage get controllers -o
  racadm storage get controllers -o -p <property names separated by comma>
  ```
- To get the list of controllers, run the following command:
  ```bash
  racadm storage get controllers
  ```
- To get the properties of PCIeSSD controller, run the following command:
  ```bash
  racadm storage get controllers:<PcieSSD controller FQDD>
  ```
- To generate and view information about the inventory of batteries, run the following command:
  ```bash
  racadm storage get batteries -o
  racadm storage get batteries --refkey <controller FQDD's separated by comma> -o
  racadm storage get batteries --refkey <controller FQDD's separated by comma> -o -p <property names separated by comma>
  ```
- To generate and view information about the inventory of virtual disks, run the following command:

```bash
racadm storage get vdisks
```

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

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

```bash
racadm storage get vdisks --refkey <controller FQDDs separated by comma> -o -p <property names separated by comma>
```

- To generate and view information about the inventory of enclosures, run the following command:

```bash
racadm storage get enclosures
```

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

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

- To get the list of enclosures, run the following command:

```bash
racadm storage get enclosures
```

- To get the properties of the PCIeSSD enclosure, run the following command:

```bash
racadm storage get enclosures:<PCIeSSD enclosure FQDD>
```

- To generate and view information about the inventory of physical disk drives, run the following command:

```bash
racadm storage get pdisks
```

```bash
racadm storage get pdisks -o
```

```bash
racadm storage get pdisks -o -p <property names separated by comma>
```

```bash
racadm storage get pdisks --refkey <enclosure/Backplanes FQDDs separated by comma>
```

```bash
racadm storage get pdisks --refkey <enclosure/Backplanes FQDDs separated by comma> -o
```

```bash
racadm storage get pdisks --refkey <enclosure/Backplanes FQDDs separated by comma> -o -p <property names separated by comma>
```

- To get the list of physical disks, run the following command:

```bash
racadm storage get pdisks
```

- To get the properties of PCIeSSD physical disk, run the following command:

```bash
racadm storage get pdisks:<PCIeSSD FQDD>
```

- To generate and view information about the inventory of fans, run the following command:

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

```bash
racadm storage get fans --refkey <enclosure FQDDs separated by comma> -o
```

```bash
racadm storage get fans --refkey <enclosure FQDDs separated by comma> -o -p <property names separated by comma>
```

- To generate and view information about the inventory of EMMs, run the following command:

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

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

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

- To generate and view information about the inventory of PSU, run the following command:

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

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

```bash
racadm storage get psus --refkey <enclosure FQDDs separated by comma> -o -p <property names separated by comma>
```
Configuration

- To view the help details for a configuration command, run the following command:
  
racadm storage help <command>

  where command can take below values

  converttoraid, converttononraid, controllers, clearconfig, createsecuritykey,
  createvd, deletesecuritykey, deletevd, encryptvd, enclosures, emms, fans,
  hotspare, importconfig, ccheck, secureerase, preparetoremove, blink, unblink,
  cancelcheck, init, modifysecuritykey, psus, pdisks, resetconfig, tempprobes,
  vdisks, and patrolread.

- To create, delete, and secure the virtual disks. To start or stop the consistency check on the specified virtual disk, run the following command:
  
racadm storage createvd:<Controller FQDD> -rl {r0|r1|r5|r6|r10|r50|r60}[-wp
  {wt|wb|wbf}] [-rp {nra|ra|ara}] [-ss {1k|2k|4k|8k|16k|32k|64k|128k|256k|512k|
  1M|2M|4M|8M|16M}][-pdkey:<comma separated PD FQDD> [-dcp {enabled|disabled|
  default}] [-name <VD name>] [-size <VD size>{b|k|m|g|t}] [-T10PIEnable]

  racadm storage init:<VD FQDD> -speed {fast|full}

  racadm storage deletevd:<VD FQDD>

  racadm storage encryptvd:<VD FQDD>

  racadm storage createsecuritykey:<Controller FQDD> -key <Key id> -xxx
  <passphrase>

  racadm storage modifysecuritykey:<Controller FQDD> -key <Key id>-xxx <old
  passphrase> -xxx <new passphrase>

  racadm storage deletesecuritykey:<Controller FQDD>

  racadm storage ccheck:<vdisk fqdd>

  racadm storage cancelcheck:<vdisk fqdd>

- To convert the physical disk drives and assign or delete a hotspare. To scan physical disks connected to a controller and detect problem, run the following command:
  
racadm storage converttononraid:<PD FQDD>

  racadm storage converttoraid:<PD FQDD>

  racadm storage hotspare:<Physical Disk FQDD> -assign yes -type dhs -vdkey:
  <FQDD of VD>

  racadm storage hotspare:<Physical Disk FQDD> -assign yes -type ghs

  racadm storage hotspare:<Physical Disk FQDD> -assign no

  racadm storage patrolread:<controller FQDD> -state start|stop

  **NOTE:** If the -assign option is no, you cannot add other options. If the -assign option is yes
  and if the -type option is not present, the global hotspare (ghs) is created by default.

- To reset, clear, and import the storage configuration to the controller, run the following command:
  
racadm storage importconfig:<Controller FQDD>

  racadm storage resetconfig:<Controller FQDD>

  racadm storage clearconfig:<Controller FQDD>

- To start or stop a blink or identify operation on the specified or PCIeSSD device, run the following command:
  
racadm storage blink:<FQDD>

  racadm storage blink:<PCIeSSD FQDD>

  racadm storage unblink:<FQDD>

  racadm storage unblink:<PCIeSSD FQDD>

  **NOTE:** The Start or Stop a Blink feature is not supported for HHHL PCIe SSD devices.
To prepare the PCIe SSD drive for removal, run the following command:

```
racadm storage prepareremove <PCIeSSD FQDD>
```

**NOTE:** The Prepare to Remove task is not supported for HHHL PCIe SSD devices.

To perform a secure erase operation on PCIe SSD device, run the following command:

```
racadm storage secureerase:<PCIeSSD FQDD>
```

**NOTE:** You can also run the command using raid in place of the storage command.

**Input**

- `-o` — Specifies the optimized version.
- `-p` — Specifies the property name.
- `--refkey` — Specifies the controller or enclosure FQDDs.
- `-r` — Sets the storage level.
  - `r0` — storage 0-Striping
  - `r1` — storage 1-Mirroring
  - `r5` — storage 5-Striping with Parity
  - `r6` — storage 6-Striping with Extra Parity
  - `r10` — storage 10-Striped Striping with Mirroring
  - `r50` — storage 50-Striped Striping with Parity
  - `r60` — storage 60-Striped Striping with Extra Parity
- `-wp `{wt|wb|wbf}` — Sets the write policy to Write Through, Write Back, or Write Back Force
- `-rp `{nra|ra|ara}` — Sets the read policy to No Read Ahead, Read Ahead, Adaptive Read Ahead
- `-ss` — Specifies the stripe size to use.
- `--pdkey:` `<PD FQDD list>` — Specifies the physical disk drive to use in the virtual disk.
- `-dcp` — Sets the Disk Cache Policy in the Virtual Disk.
  - `enabled` — Allows the virtual disk to use the cache.
  - `disabled` — Does not allow the virtual disk to use the cache.
  - `default` — Uses the default cache policy. For SAS drives, use the `disabled` option and for SATA drives, use the `enabled` option by default.
- `-name `<VD name>` — Specifies the name of the virtual disk.
- `-size `<VD size>` — Specifies the size of each virtual disk.
  - `b` — Specifies the size in bytes
  - `k` — Specifies the size in kilobytes
  - `m` — Specifies the size in megabytes
  - `g` — Specifies the size in gigabytes
  - `t` — Specifies the size in terabytes
- `-sc` — Number of spans in a virtual disk (required for multi-span RAID level).

**NOTE:**

- For PERC9, if the value of controller.SupportRAID10UnevenSpans is supported, you can enter only 0 for this option while creating RAID level 10. The created RAID10 virtual disk will display the spandepth as 1 (default).
- For other controllers:
  - The default value for multi-span RAID levels is 2 and for basic RAID level is 1.
  - For hybrid RAID levels such as RAID10, RAID50, and RAID60, this option is mandatory.
  - The value for `-sc` option can be 0 only for RAID10.
- `-T10PIEnable` — Creates a virtual disk with protection information.
- `-key `<Key id>` — Specifies the key id.
- `-passwd `<passphrase>` — Specifies the passphrase.
- `-newpasswd `<passphrase>` — Specifies the new passphrase.
- `-assign `{yes | no}` — Assigns or unassigns the disk as a hotspare.
-type { ghs | dhs} — Assigns a global or dedicated hotspare.

-vdkey:<VD FQDD> — Assigns the dedicated hotspare to the specified virtual disk. This option is required for dedicated hotspare.

-state <start|stop> — start value starts a patrol read operation. stop value stops a running patrol read operation.

**NOTE:** To start the operation, the Controller.PatrolReadMode must be in Manual mode.

-speed — Specifies the initialization of the Virtual disk.

- fast — Performs fast initialization.

- full — Performs slow initialization.

- blink: <FQDD> or unblink: <FQDD> can be physical disk drives, virtual disks, or PCIeSSD.

- <PCIeSSD FQDD> — Specifies the PCIeSSD FQDD.

- <PCIeSSD controller|enclosure FQDD> — Specifies the PCIeSSD controller or enclosure FQDD.

- preparetoremove — Specifies the PCIeSSD drive to prepare for removal.

**NOTE:** Ensure that ISM is installed and running to perform the preparetoremove operation.

- secureerase— Specifies the PCIeSSD drive to perform the secure erase operation.

**Example Inventory**

To view the help details for get command, run the following command:

```
racadm>>storage help get
racadm storage help get
```

Storage monitoring and inventory of hardware RAID connected to the system.

**Usage :**

```
racadm storage get
racadm storage help <Object type I/II>
racadm storage get <Object type I>
racadm storage get <Object type I> -current
racadm storage get <Object type I> -pending
racadm storage get <Object type I> -o
racadm storage get <Object type I>:<FQDD's of Object type I separated by comma> -p <property names separated by comma>
racadm storage get <Object type I>:<FQDD's of Object type I separated by comma> -o -p <property names separated by comma>
racadm storage get <Object type II> --refkey <reference keys separated by comma>
racadm storage get <Object type II> --refkey <reference keys separated by comma> -o -p <property names separated by comma>
```

**Valid Options:**

**Object type I** : controllers, batteries, vdisks, pdisks, fans, emms, tempprobes, psus, enclosures.

**Object type II** : batteries, vdisks, pdisks, fans, emms, psus, tempprobes, enclosures.

- **-current** *(optional)*: Displays only the current Raid objects from storage. If -pending not mentioned it will consider as the default option

- **-pending** : Displays only the Pending Raid Objects from Storage.

- **-o** : Displays all the properties of the selected Key or Object.

- **-p** : Displays the property names with filter.

- **FQDD's** : Displays all the properties of the FQDD's Key.

- **--refkey** : Displays all the reference key of Object type.

- **help** : Displays each object type help.

**NOTE:** Maximum Property names can be specified in -p option is = 10. **NOTE:** Maximum FQDD's or refkey can be specified is = 3.

**Usage Examples :**

```
racadm storage get controllers
```
racadm storage get psus
racadm storage get controllers -o
racadm storage get controllers -o -current
racadm storage get controllers -o -pending
racadm storage get enclosures -o
racadm storage get controllers -o -p name,status
racadm storage get vdisks -o -p layout,status
racadm storage get enclosures -o
racadm storage get controllers -o -p name,status
racadm storage get emms:EMM.Slot.0:ENCLOSURE.EXTERNAL.0-0:RAID.INTEGRATED.0
racadm storage get emms:EMM.Slot.0:ENCLOSURE.EXTERNAL.0-0:RAID.INTEGRATED.0 -p status
racadm storage get batteries --refkey RAID.INTEGRATED.0
racadm storage get emms:EMM.Slot.0:ENCLOSURE.EXTERNAL.0-0:RAID.INTEGRATED.0 -p status
racadm storage get emms:EMM.Slot.0:ENCLOSURE.EXTERNAL.0-0:RAID.INTEGRATED.0 -p status
racadm storage get batteries --refkey RAID.INTEGRATED.0 -o -p name,status
racadm storage get fans --refkey RAID.INTEGRATED.0 -o -p status,speed,name

• To generate and view information about the inventory of controllers, virtual disks, storage enclosures, and physical disk drives.

• To generate and view information about the inventory of storage root node.

   This command retrieves the status of the inventory for storage root node.

   racadm storage get status
   raid Root Node Status : Ok

• To generate and view information about the inventory of controllers connected to the server.

   racadm storage get controllers
   RAID.Integrated.1-1

The following command is an optimized version and displays the full controller objects along with their keys:

   racadm storage get controllers -o

   RAID.Integrated.1-1
   Status = Ok
   DeviceDescription = Integrated RAID Controller 1
   RollupStatus = Ok
   Name = PERC H730P Mini (Embedded)
   FirmwareVersion = 25.2.1.0025
   DriverVersion = Information Not Available
   RebuildRate = 45
   BgiRate = 13
   CheckConsistencyRate = 18
   ReconstructRate = 12
   PatrolReadRate = 21
   PatrolReadMode = Disabled
   PatrolReadState = Stopped
   CheckConsistencyMode = Normal
   LoadBalanceSetting = Disabled
   CopybackMode = OFF
   PreservedCache = Not Present
   CacheMemorySize = 2048 MB
   PersistHotspare = Disabled
   SpindownUnconfiguredDrives = Disabled
   SpindownHotspare = Disabled
   Timeintervalforspindown = 30 (Minutes)
   SecurityStatus = Security Key Assigned
   EncryptionMode = Supported with LKM
   SasAddress = 0x5B8CA3A0F3073700
   PciDeviceId = 0x0d
   PciSubdeviceId = 0x1f47
   PciVendorId = 0x1000
   PciSubvendorId = 0x1028
   PciBus = 0x3
   PciDevice = 0x0
   PciFunction = 0x0
   BusWidth = Unknown
   SlotLength = Unknown
   SlotType = Unknown
   MaxCapableSpeed = 12.0 Gb/s
   LearnMode = Not supported
   T10PICapability = Not informed
The following command displays the filtered property values for all returned controller objects:

```
racadm storage get controllers -o -p Name
```

```
RAID.Integrated.1-1
Name = PERC H710P Adapter (Embedded)
```

The following examples show the pending operation when used with `storage get <object>` commands:

To list storage objects without displaying the properties:

- This operation displays `vdisk`, which has pending operation:
  ```
racadm storage get vdisks -pending
  DISK.Virtual.267386880:RAID.Slot.5-1
  ```

- This operation displays controllers, which have pending operations:
  ```
racadm storage get controllers -pending
  RAID.Integrated.1-1
  ```

- This operation displays `pdisk`, which has pending operation:
  ```
racadm storage get pdisks -pending
  Disk.Bay.20:Enclosure.Internal.0-1:RAID.Integrated.1-1
  ```

- This operation displays enclosures, which have pending operations:
  ```
racadm storage get enclosures -pending
  Enclosure.Internal.0-1:RAID.Integrated.1-1
  ```

Changing the attribute by using `racadm set storage` or `storage configuration` command displays the storage object in the `-pending` command output. If there are no pending objects, the following error message is displayed:

```
racadm storage get pdisks -pending
ERROR: STOR0103 : No physical disks are displayed.
```

Check if the server has power, physical disks are available, and physical disks are connected to the enclosure or backplane.

The following examples show the pending operation while listing the properties:

By default, if there is no change in properties, the `-pending` command displays the current value. If the property has any pending objects, the `-pending` command displays the pending value.

- This operation displays the current state of `pdisk`, which is in `Ready` state:
  ```
/admin1-> racadm storage get pdisks -o -p state
Disk.Bay.4:Enclosure.Internal.0-1:RAID.Integrated.1-1
State = Ready
```

- This operation displays state of a `pdisk` on which `createvd` operation is pending:
  ```
/admin1-> racadm storage get pdisks -o -p state -pending
Disk.Bay.4:Enclosure.Internal.0-1:RAID.Integrated.1-1
```

The following command displays the output for Stash support and full controller objects along with their keys:

```
racadm storage get controllers -o
```

```
RAID.Integrated.1-1
Status = Ok
DeviceDescription = Integrated RAID Controller 1 in Front Chassis Slot 3
RollupStatus = Ok
Name = Slot 3, PERC FD33xS (Controller 1)
FirmwareVersion = 25.2.2-0001
RebuildRate = 55
BgiRate = 55
CheckConsistencyRate = 55
ReconstructRate = 55
```

---

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SupportRAID10UnevenSpans</td>
<td>Supported</td>
</tr>
<tr>
<td>SupportEnhancedAutoForeignImport</td>
<td>Supported</td>
</tr>
<tr>
<td>EnhancedAutoImportForeignConfig</td>
<td>Enabled</td>
</tr>
<tr>
<td>SupportControllerBootMode</td>
<td>Supported</td>
</tr>
<tr>
<td>ControllerBootMode</td>
<td>Continue Boot On Error</td>
</tr>
<tr>
<td>RealtimeConfigurationCapability</td>
<td>Capable</td>
</tr>
<tr>
<td>CurrentControllerMode</td>
<td>RAID</td>
</tr>
<tr>
<td>Property</td>
<td>Value</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>PatrolReadRate</td>
<td>50</td>
</tr>
<tr>
<td>PatrolReadMode</td>
<td>Manual</td>
</tr>
<tr>
<td>PatrolReadState</td>
<td>Stopped</td>
</tr>
<tr>
<td>CheckConsistencyMode</td>
<td>Normal</td>
</tr>
<tr>
<td>LoadBalanceSetting</td>
<td>Disabled</td>
</tr>
<tr>
<td>CopybackMode</td>
<td>OFF</td>
</tr>
<tr>
<td>PreservedCache</td>
<td>Not Present</td>
</tr>
<tr>
<td>CacheMemorySize</td>
<td>2048 MB</td>
</tr>
<tr>
<td>PersistHotspare</td>
<td>Disabled</td>
</tr>
<tr>
<td>SpindownUnconfiguredDrives</td>
<td>Disabled</td>
</tr>
<tr>
<td>SpindownHotspare</td>
<td>Disabled</td>
</tr>
<tr>
<td>TimeIntervalForSpindown</td>
<td>30 (Minutes)</td>
</tr>
<tr>
<td>SecurityStatus</td>
<td>Encryption Capable</td>
</tr>
<tr>
<td>EncryptionMode</td>
<td>None</td>
</tr>
<tr>
<td>SasAddress</td>
<td>0x5B083FE0E3EF5A00</td>
</tr>
<tr>
<td>PciDeviceId</td>
<td>0x5d</td>
</tr>
<tr>
<td>PciSubdeviceId</td>
<td>0x1f4d</td>
</tr>
<tr>
<td>PciVendorId</td>
<td>0x1000</td>
</tr>
<tr>
<td>PciSubvendorId</td>
<td>0x1028</td>
</tr>
<tr>
<td>PciBus</td>
<td>0x7</td>
</tr>
<tr>
<td>PciDevice</td>
<td>0x0</td>
</tr>
<tr>
<td>PciFunction</td>
<td>0x0</td>
</tr>
<tr>
<td>BusWidth</td>
<td>8x or x8</td>
</tr>
<tr>
<td>SlotLength</td>
<td>Other</td>
</tr>
<tr>
<td>SlotType</td>
<td>PCI Express Gen3</td>
</tr>
<tr>
<td>MaxCapableSpeed</td>
<td>12.0 Gb/s</td>
</tr>
<tr>
<td>LearnMode</td>
<td>Not supported</td>
</tr>
<tr>
<td>TOIPICapability</td>
<td>Capable</td>
</tr>
<tr>
<td>SupportRAID10UnevenSpans</td>
<td>Supported</td>
</tr>
<tr>
<td>SupportEnhancedAutoForeignImport</td>
<td>Supported</td>
</tr>
<tr>
<td>EnhancedAutoImportForeignConfig</td>
<td>Disabled</td>
</tr>
<tr>
<td>SupportControllerBootMode</td>
<td>Supported</td>
</tr>
<tr>
<td>ControllerBootMode</td>
<td>Continue Boot On Error</td>
</tr>
<tr>
<td>RealtimeConfigurationCapability</td>
<td>Supported</td>
</tr>
<tr>
<td>CurrentControllerMode</td>
<td>RAID</td>
</tr>
</tbody>
</table>

The following command displays the output for software RAID and full controller objects along with their keys:

```
racadm storage get controllers -o
```

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAID.Embedded.1-1</td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td>Unknown</td>
</tr>
<tr>
<td>DeviceDescription</td>
<td>Embedded RAID Controller 1</td>
</tr>
<tr>
<td>RollupStatus</td>
<td>Unknown</td>
</tr>
<tr>
<td>Name</td>
<td>PERC S130 Controller (PCI Slot 0)</td>
</tr>
<tr>
<td>PciSlot</td>
<td>0</td>
</tr>
<tr>
<td>FirmwareVersion</td>
<td>4.0.0-0037</td>
</tr>
<tr>
<td>DriverVersion</td>
<td>Information Not Available</td>
</tr>
<tr>
<td>RebuildRate</td>
<td>0</td>
</tr>
<tr>
<td>BgiRate</td>
<td>0</td>
</tr>
<tr>
<td>CheckConsistencyRate</td>
<td>0</td>
</tr>
<tr>
<td>ReconstructRate</td>
<td>0</td>
</tr>
<tr>
<td>PatrolReadRate</td>
<td>0</td>
</tr>
<tr>
<td>PatrolReadMode</td>
<td>Not supported</td>
</tr>
<tr>
<td>PatrolReadState</td>
<td>Unknown</td>
</tr>
<tr>
<td>CheckConsistencyMode</td>
<td>Not supported</td>
</tr>
<tr>
<td>LoadBalanceSetting</td>
<td>Not Supported</td>
</tr>
<tr>
<td>CopybackMode</td>
<td>Not supported</td>
</tr>
<tr>
<td>PreservedCache</td>
<td>Not Present</td>
</tr>
<tr>
<td>CacheMemorySize</td>
<td>0 MB</td>
</tr>
<tr>
<td>PersistHotspare</td>
<td>Disabled</td>
</tr>
<tr>
<td>SpindownUnconfiguredDrives</td>
<td>Disabled</td>
</tr>
<tr>
<td>SpindownHotspare</td>
<td>Disabled</td>
</tr>
<tr>
<td>TimeIntervalForSpindown</td>
<td>0 (Minutes)</td>
</tr>
<tr>
<td>SecurityStatus</td>
<td>Unknown</td>
</tr>
<tr>
<td>EncryptionMode</td>
<td>None</td>
</tr>
<tr>
<td>SasAddress</td>
<td>Not applicable</td>
</tr>
<tr>
<td>PciDeviceId</td>
<td>0x8d66</td>
</tr>
<tr>
<td>PciSubdeviceId</td>
<td>0x61b</td>
</tr>
</tbody>
</table>
To generate and view information about the inventory of batteries connected to the controller, run the following command:

```
racadm storage get batteries
```

The following command is an optimized version and displays the batteries along with their keys:

```
racadm storage get batteries -o
```

```
Battery.Integrated.1:RAID.Integrated.1-1
```

```
Name = Battery
DeviceDescription = Battery on Integrated raid Controller 1
Status = Ok
State = Ready
```

The following command displays the filtered property values for all battery objects:

```
racadm storage get batteries -o -p Name
```

```
Battery.Integrated.1:RAID.Integrated.1-1
```

```
Name = Battery
```

The following command displays all battery keys connected to the controllers:

```
racadm storage get batteries --refkey RAID.Integrated.1-1
```

```
Battery.Integrated.1:RAID.Integrated.1-1
```

The following command is an optimized and filtered version:

```
racadm storage get batteries --refkey RAID.Integrated.1-1 -o -p Name
```

```
Battery.Integrated.1:RAID.Integrated.1-1
```

```
Name = Battery
```

To generate and view information about the inventory of virtual disks connected to the controller, run the following command:

```
racadm storage get vdisks
```

```
Disk.Virtual.0:RAID.Integrated.1-1
```

```
Status = Ok
DeviceDescription = Virtual Disk 0 on Integrated RAID Controller 1
```

The following command displays all virtual disk keys connected to the controllers:

```
racadm storage get vdisks --refkey RAID.Integrated.1-1
```

```
Disk.Virtual.0:RAID.Integrated.1-1
```

The following command is an optimized and filtered version:

```
racadm storage get vdisks --refkey RAID.Integrated.1-1 -o -p DeviceDescription,OperationalState
```

```
Disk.Virtual.0:RAID.Integrated.1-1
```

```
DeviceDescription = Virtual Disk 0 on Integrated raid Controller 1
OperationalState = Not applicable
```

To generate and view information about the inventory of virtual disks, run the following command:

```
racadm storage get vdisks -o
```

```
Disk.Virtual.2:RAID.Integrated.1-1
```

```
Status = Ok
DeviceDescription = Virtual Disk 2 on Integrated RAID Controller 1
Name = OS
```
<table>
<thead>
<tr>
<th>RollupStatus</th>
<th>Ok</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Online</td>
</tr>
<tr>
<td>OperationalState</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Layout</td>
<td>Raid-0</td>
</tr>
<tr>
<td>Size</td>
<td>278.88 GB</td>
</tr>
<tr>
<td>SpanDepth</td>
<td>1</td>
</tr>
<tr>
<td>AvailableProtocols</td>
<td>SAS</td>
</tr>
<tr>
<td>MediaType</td>
<td>HDD</td>
</tr>
<tr>
<td>ReadPolicy</td>
<td>Read Ahead</td>
</tr>
<tr>
<td>WritePolicy</td>
<td>Write Back</td>
</tr>
<tr>
<td>StripeSize</td>
<td>64K</td>
</tr>
<tr>
<td>DiskCachePolicy</td>
<td>Default</td>
</tr>
<tr>
<td>BadBlocksFound</td>
<td>NO</td>
</tr>
<tr>
<td>Secured</td>
<td>NO</td>
</tr>
<tr>
<td>RemainingRedundancy</td>
<td>0</td>
</tr>
<tr>
<td>EnhancedCache</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>T10P1Status</td>
<td>Disabled</td>
</tr>
<tr>
<td>BlockSizeInBytes</td>
<td>512</td>
</tr>
</tbody>
</table>

To generate and view information about the inventory of storage enclosures connected to the connector, this command displays all enclosure objects for the connector FQDD:

```bash
racadm storage get enclosures -o Enclosure.Internal.0-1:RAID.Integrated.1-1
```

The following command displays all enclosure keys connected to the connectors:

```bash
racadm storage get enclosures --refkey RAID.Integrated.1-1 Enclosure.Internal.0-1:RAID.Integrated.1-1
```
The following command is an optimized and filtered version:

```
racadm storage get enclosures --refkey RAID.Integrated.1-1 -o -p Name
Enclosure.Internal.0-1:RAID.Integrated.1-1
Name = BP12G+EXP 0:1
```

To generate and view information about the inventory of physical disk drives connected to the enclosure or backplanes, run the following command:

```
racadm storage get pdisks
```

```
Disk.Bay.0:Enclosure.Internal.0-1:RAID.Integrated.1-1
```

The following command is an optimized version and displays the full controller objects along with their keys:

```
racadm storage get pdisks -o
```

```
racadm storage get pdisks
```

```
```

```
Status                           = Ok
DeviceDescription                = Disk 23 in Backplane 1 of Integrated RAID Controller
RollupStatus                     = Ok
Name                             = Physical Disk 0:1:23
State                            = Online
OperationState                   = Not Applicable
PowerStatus                      = Spun-Up
Size                             = 558.38 GB
FailurePredicted                 = NO
RemainingRatedWriteEndurance     = Not Applicable
SecurityStatus                   = Not Capable
BusProtocol                      = SAS
MediaType                        = HDD
UsedRaidDiskSpace                = 136.13 GB
AvailableRaidDiskSpace           = 0.00 GB
Hotspare                         = NO
Manufacturer                     = SEAGATE
ProductId                        = ST9600204SS
Revision                         = FM08
SerialNumber                     = 6WN09DXN
PartNumber                       = CN07T0DW7262211M01Y6A00
NegotiatedSpeed                  = 6.0 Gb/s
ManufacturedDay                  = 2
ManufacturedWeek                 = 4
ManufacturedYear                 = 2011
SasAddress                       = 0x5000C5003324E93D
FormFactor                       = 2.5 Inch
RaidNominalMediumRotationRate    = 10000
T10PICapability                  = Not Capable
BlockSizeInBytes                 = 512
MaxCapableSpeed                  = 6 Gb/s
```

The following command displays the filtered property values for all returned controller objects:

```
racadm storage get pdisks -o -p State
```

```
Disk.Bay.0:Enclosure.Internal.0-1:RAID.Integrated.1-1
State = Online
```

The following command displays all physical disk drive keys connected to the enclosures:

```
racadm storage get pdisks --refkey RAID.Integrated.1-1
```

```
Disk.Bay.0:Enclosure.Internal.0-1:RAID.Integrated.1-1
```

The following command is an optimized version and displays all disk objects for the enclosure FQDD:

```
racadm storage get pdisks --refkey Enclosure.Internal.0-1:RAID.Integrated.1-1 -o
```

```
racadm storage get pdisks -o
```

```
Disk.Bay.0:Enclosure.Internal.0-1:RAID.Integrated.1-1
```

```
Status                           = Ok
DeviceDescription                = Disk 0 in Backplane 1 of Integrated raid Controller 1
RollupStatus                     = Ok
Name                             = Physical Disk 0:1:0
State                            = Online
OperationState                   = Not Applicable
PowerStatus                      = Spun-Up
```
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>278.88 GB</td>
</tr>
<tr>
<td>FailurePredicted</td>
<td>NO</td>
</tr>
<tr>
<td>RemainingRatedWriteEndurance</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>SecurityStatus</td>
<td>Not Capable</td>
</tr>
<tr>
<td>BusProtocol</td>
<td>SAS</td>
</tr>
<tr>
<td>MediaType</td>
<td>HDD</td>
</tr>
<tr>
<td>UsedraidDiskSpace</td>
<td>278.88 GB</td>
</tr>
<tr>
<td>AvailableraidDiskSpace</td>
<td>0.00 GB</td>
</tr>
<tr>
<td>Hotspare</td>
<td>NO</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>SEAGATE</td>
</tr>
<tr>
<td>ProductId</td>
<td>ST9300605SS</td>
</tr>
<tr>
<td>Revision</td>
<td>CS05</td>
</tr>
<tr>
<td>SerialNumber</td>
<td>6XP40SA9</td>
</tr>
<tr>
<td>PartNumber</td>
<td>CN0745GC7262228706R7A00</td>
</tr>
<tr>
<td>NegotiatedSpeed</td>
<td>6.0 Gb/s</td>
</tr>
<tr>
<td>ManufacturedDay</td>
<td>4</td>
</tr>
<tr>
<td>ManufacturedWeek</td>
<td>32</td>
</tr>
<tr>
<td>ManufacturedYear</td>
<td>2012</td>
</tr>
<tr>
<td>SasAddress</td>
<td>0x5000C5005952386D</td>
</tr>
<tr>
<td>FormFactor</td>
<td>2.5 Inch</td>
</tr>
<tr>
<td>raidNominalMediumRotationRate</td>
<td>10000</td>
</tr>
<tr>
<td>T10PICapability</td>
<td>Not Capable</td>
</tr>
<tr>
<td>BlockSizeInBytes</td>
<td>512</td>
</tr>
<tr>
<td>MaxCapableSpeed</td>
<td>6 Gb/s</td>
</tr>
</tbody>
</table>

The following command is an optimized and filtered version:

```
racadm storage get pdisks --refkey Enclosure.Internal.0-1:RAID.Integrated.1-1 -o -p State
Disk.Bay.0:Enclosure.Internal.0-1:RAID.Integrated.1-1
State = Online
```
The following command is an optimized and filtered version:

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

- To get the list of enclosures and properties of the PCIeSSD enclosure.
  - The following command provides the list of enclosures:
    ```
racadm storage get enclosures
    Enclosure.Internal.0-1:RAID.Integrated.1-1
    Enclosure.Internal.0-1:PCIeExtender.Slot.3
    ```
  - The following command provides the properties of the specified PCIeSSD enclosure:
    ```
racadm storage get enclosures:Enclosure.Internal.0-1:PCIeExtender.Slot.3
    Enclosure.Internal.0-1:PCIeExtender.Slot.3
    RollupStatus = Ok
    DeviceDescription = Enclosure.Internal.0-1:PCIeExtender.Slot.3
    Name = PCIe SSD BP 1
    SlotCount = 4
    FirmwareVersion = 0.80
    ```
- To get the list of physical disks and properties of the specified PCIeSSD physical disk.
  - The following command provides the list of physical disks:
    ```
racadm storage get pdisks
    Disk.Bay.0:Enclosure.Internal.0-1:RAID.Integrated.1-1
    Disk.Bay.1:Enclosure.Internal.0-1:RAID.Integrated.1-1
    Disk.Bay.2:Enclosure.Internal.0-1:RAID.Integrated.1-1
    Disk.Bay.3:Enclosure.Internal.0-1:RAID.Integrated.1-1
    Disk.Bay.4:Enclosure.Internal.0-1:RAID.Integrated.1-1
    Disk.Bay.5:Enclosure.Internal.0-1:RAID.Integrated.1-1
    Disk.Bay.6:Enclosure.Internal.0-1:PCIeExtender.Slot.3
    Disk.Bay.7:Enclosure.Internal.0-1:PCIeExtender.Slot.3
    Disk.Bay.8:Enclosure.Internal.0-1:PCIeExtender.Slot.3
    Disk.Bay.9:Enclosure.Internal.0-1:PCIeExtender.Slot.3
    ```
  - The following command provides the properties of the specified PCIeSSD physical disk:
    ```
racadm storage get pdisks:Disk.Bay.8:Enclosure.Internal.0-1:PCIeExtender.Slot.3
    Disk.Bay.8:Enclosure.Internal.0-1:PCIeExtender.Slot.3
    Status = Ok
    DeviceDescription = PCIe Solid-State Drive in Slot 8 in Bay 1
    Name = Physical Device 8
    State = Ready
    Size = 745.21 GB
    BusProtocol = PCIe
    MediaType = SSD
    Model = SAMSUNG MZWEI800HAGM 000D3
    ProductId = a820
    SerialNumber = S1J1NYAD90019
    DeviceProtocol = NVMe1.0
    Manufacturer = SAMSUNG
    PCIeNegotiatedLinkWidth = x4
    PCIeCapableLinkWidth = x4
    MaxCapableSpeed = 8 GT/s
    NegotiatedSpeed = 8 GT/s
    FormFactor = 2.5 Inch
    Revision = IPM0ED35SAM SAMSUNG MZWEI800HAGM 000D3
    RemainingRatedWriteEndurance = 100 %
    FailurePredicted = NO
    ```
- To get the list of controllers and properties of the PCIeSSD controller.
  - The following command provides the list of controllers:
    ```
racadm storage get controllers
    RAID.Integrated.1-1
    PCIeExtender.Slot.3
    ```
  - The following command provides the properties of the specified PCIeSSD controller:
    ```
racadm storage get controllers:PCIeExtender.Slot.3
    PCIeExtender.Slot.3
    ```
RollupStatus = Ok
DeviceDescription = PCIe Extender in PCIe Slot 3
Status = Ok
Name = PCIeExtender 3 (PCI Slot 3)

Configuration

- To view the help details for a configuration command, run the following command:
  admin1-> racadm storage help createvd
  Storage configuration of hardware RAID connected to the system.

Usage:
racadm storage createvd:<Controller FQDD> -rl {r0|r1|r5|r10|r50|r60}[-wp {wt|wb|wbf}] [-rp {nra|ra|ara}]
  [-ss {1k|2k|4k|8k|16k|32k|64k|128k|256k|512k|1M|2M|4M|8M|16M}]
  -pdkey:<comma separated PD FQDD> [-dcp {enabled|disabled|default}]
  [-name <VD name>] [-size <VD size>{b|k|m|g|t}] [-T10PIEnable]

Options:
- rl                      : Set the RAID Level
  r0             : RAID 0  - Striping
  r1             : RAID 1  - Mirroring
  r5             : RAID 5  - Striping with Parity
  r6             : RAID 6  - Striping with Extra Parity
  r10            : RAID 10 - Spanned Striping with Mirroring
  r50            : RAID 50 - Spanned Striping with Parity
  r60            : RAID 60 - Spanned Striping with Extra Parity
- wp {wt | wb | wbf} : Set the write policy to Write Through or Write Back or Write Back Force
- rp {nra|ra|ara} : Set the read policy to No Read Ahead, Read Ahead, Adaptive Read Ahead
- ss                      : Specify the stripe size to use
- pdkey:<PD FQDD list> : The PDs to use in the VD.
- dcp                     : Set the Disk Cache Policy in the VD
  enabled    : Enabled - Allow the disk to use it's cache
  disabled   : Disabled - Disallow the disk from using it's cache
  default    : Default - Use the default cache policy.
SAS Drives - Use Disabled by Default
SATA Drives - Use Enabled by Default
- name <VD name> : The name to give the VD
- size <VD size> : The size of the VD
  b                : Specify the size in bytes
  k                : Specify the size in kilobytes
  m                : Specify the size in megabytes
  g                : Specify the size in gigabytes
  t                : Specify the size in terabytes
- sc               : Spandepth: Number of spans in a virtual disk

Note:
- This option is mandatory for hybrid raid level like RAID 10, RAID50 and RAID60.
- The default value is one for basic RAID levels.
- If RAID10 Uneven Span is Supported then for RAID10:
  - -sc option will be optional.
  - Will allow only 0 value for this option.
- T10PIEnable       : To create a VD with PI

Description:
Create a VD.

Examples:
racadm storage createvd:RAID.Integrated.1-1 -rl r0 -pdkey:Disk.Bay.0:Enclosure.Internal.0-0:RAID.Integrated.1-1
  To create, delete, and secure the virtual disks.
  The following command creates a virtual disk:
  racadm storage createvd:RAID.Integrated.1-1 -rl r0 -pdkey:Disk.Bay.0:Enclosure.Internal.0-0:RAID.Integrated.1-1
The following command starts an initialization operation on a specified virtual disk:
```
racadm storage init:Disk.Virtual.0:RAID.Integrated.1-1 -speed fast
```

The following command deletes the specified virtual disk:
```
racadm storage deletevd:Disk.Virtual.0:RAID.Integrated.1-1
```

The following command encrypts the specified virtual disk:
```
racadm storage encryptvd:Disk.Virtual.0:RAID.Integrated.1-1
```

**NOTE:** Virtual disk must be created with SED.

The following command assigns security key for controller:
```
racadm storage createsecuritykey:RAID.Integrated.1-1 -key <Key id> -xxx <passphrase>
```

The following command modifies security key for controller:
```
racadm storage modifysecuritykey:RAID.Integrated.1-1 -key <Key id> -oldpasswd <oldpassphrase> -newpasswd <newpassphrase>
```

The following command deletes security key for controller:
```
racadm storage deletesecuritykey:RAID.Integrated.1-1
```

To convert the physical disk drive and assign hotspare.

The following command converts the specified non-storage physical disk drive to a storage capable physical disk drive:
```
racadm storage converttoraid:Disk.Bay.0:Enclosure.Internal.0-0:RAID.Integrated.1-1
```

The following command converts the specified physical disk drive to a non-storage physical disk drive:
```
racadm storage converttononraid:Disk.Bay.0:Enclosure.Internal.0-0:RAID.Integrated.1-1
```

The following command assigns or unassigns a global or dedicated Hot spare:
```
racadm storage hotspare:Disk.Bay.0:Enclosure.Internal.0-0:RAID.Integrated.1-1 -assign no
racadm storage hotspare:Disk.Bay.0:Enclosure.Internal.0-0:RAID.Integrated.1-1 -assign yes -type ghs
racadm storage hotspare:Disk.Bay.0:Enclosure.Internal.0-0:RAID.Integrated.1-1 -assign yes -type dhs -vdkey:Disk.Virtual.0:RAID.Integrated.1-1
```

To reset, clear, and import the storage configuration to the controller.

The following command imports the current foreign configuration from the controller:
```
racadm storage importconfig:RAID.Integrated.1-1
```

The following command deletes all virtual disks and un-assign hot spare from the associated controller:
```
racadm storage resetconfig:RAID.Integrated.1-1
```

The following command clears the current foreign configuration from the controller:
```
racadm storage clearconfig:RAID.Integrated.1-1
```

**NOTE:** After a `resetconfig` or `clearconfig` operation, the data cannot be reversed.

To blink or unblink the PCIeSSD device.

The following command blinks the specified PCIeSSD device:
```
racadm storage blink:Disk.Bay.8:Enclosure.Internal.0-1:PCIeExtender.Slot.3
```

STOR095 : Storage operation is successfully completed.

The following command unblinks the specified PCIeSSD device:
```
racadm storage unblink:Disk.Bay.8:Enclosure.Internal.0-1:PCIeExtender.Slot.3
```

STOR095 : Storage operation is successfully completed.

To prepare the specified PCIeSSD device for removal, run the following command:
```
racadm storage preparetoremove: Disk.Bay.8:Enclosure.Internal.0-1:PCIeExtender.Slot.3
```

STOR089 : Successfully accepted the storage configuration operation.

To apply the configuration operation, create a configuration job with --realtime option.

To create the required commit jobs, run the jobqueue command.

For more information about the jobqueue command, enter the RACADM command "racadm help jobqueue"

To perform a secure erase operation on the specified PCIeSSD device, run the following command:
```
racadm storage secureerase: Disk.Bay.8:Enclosure.Internal.0-1:PCIeExtender.Slot.3
```

RAC1040 : Successfully accepted the storage configuration operation.
To apply the configuration operation, create a configuration job, and then restart the server. To create the required commit and reboot jobs, run the jobqueue command. For more information about the jobqueue command, enter the RACADM command “racadm help jobqueue”

swinventory

**Description**
Displays the list of software objects and associated properties installed on a server.

**NOTE:** Lifecycle Controller and CSIOR may not be enabled to run this subcommand.

**Synopsis**
racadm swinventory

**Input**
racadm swinventory

**Output**
racadm swinventory

```
------------------SOFTWARE INVENTORY-------------------
ComponentType    = FIRMWARE
ElementName      = Power Supply.Slot.2
FQDD             = PSU.Slot.2
InstallationDate = 2013-06-11T13:02:46Z
Current Version  = 07.2B.7D

ComponentType    = FIRMWARE
ElementName      = Integrated Remote Access Controller
FQDD             = iDRAC.Embedded.1-1
InstallationDate = NA
Rollback Version = 1.50.50
```

**NOTE:** Configuration changes and firmware updates that are made within the operating system may not reflect properly in the inventory until you perform a server restart.

systemconfig

**Description**
Enables you to perform the following:

- Backup and restore for iDRAC and entire system configuration.
- Automatic scheduling of backup operation.
- View the auto backup feature settings.
- Clear the auto backup feature settings.
NOTE:

• To run this subcommand, you require the Server Profile Export and Import license.
• Backup operation is licensed (Enterprise) but restore operation is not licensed.
• If Lifecycle Controller is disabled, starting a restore operation is unsuccessful.
• If CSIOR is disabled, the system inventory can have old data during the backup operation. An appropriate warning message is displayed.
• The autobackupscheduler can be enabled or disabled. For more information about enable or disable, see LifecycleController.LCAtributes.autobackup
• The minimum Lifecycle Controller version 1.3 is required.

Synopsis

- racadm systemconfig backup -f <filename> <target> [-n passphrase] [-l <location> -u <user name> -p <password>] [-vFlash]
- racadm systemconfig restore -f <filename> <target> [-n passphrase ] [-nopreserve] [-l <location> -u <user name> -p <password>] [-vFlash]

To create an AutoBackup Schedule.

To view an AutoBackup Schedule.
racadm systemconfig getbackupscheduler

To delete an AutoBackup Schedule.
racadm systemconfig clearbackupscheduler

NOTE: After the parameters are cleared, the AutoBackupScheduler is disabled. To schedule the backup again, enable the AutoBackupScheduler.

Input

- -n — Specifies a pass phrase used to encrypt or decrypt the configuration data. The pass phrase must have 8 to 32 characters, and one upper and lower case character.

NOTE: This pass phrase is optional.

- -l — Specifies the network share location, can be either CIFS or NFS.

- -f — Specifies the image location and the file name.

NOTE: If the file is in a subfolder within the share location, then specify the network share location in the -l option and specify the subfolder location and the filename in the -f option.

- -u — Specifies the user name for the remote share access.

- -p — Specifies the password for the remote share access.

- --vFlash — Selects vFlash SD as target location for back up.

- --nopreserve — Deletes all the virtual disks and configurations.

- -time: Specifies the time to schedule an autobackup in HH:MM format. This parameter must be specified.
- -dom: Specifies the day of month to schedule an autobackup. Valid values are 1–28, L(Last day) or '*' (default — any day).
- -wom: Specifies the week of month to schedule an autobackup. Valid values are 1–4, L(Last week) or '*' (default — any week).
- -dow: Specifies the day of week to schedule an autobackup. Valid values are sun, mon, tue, wed, thu, fri, sat, or 'L' (default — any day).
NOTE: The -dom, -wom, or -dow option must be included in the command for the autoupdate schedule. The * value for the options must be included within ' ' (single quotation mark).

- If the -dom option is specified, then the -wom and -dom options are not required.
- If the -wom option is specified, then the -dow is required and -dom is not required.
- If the -dom option is non-'*', then the schedule repeats by month.
- If the -wom option is non-'*', then the schedule repeats by month.
- If the -dom and -wom options are '*' and the -dow option is non-'*', then the schedule repeats by week.
- If all the three -dom, -wom and -dow options are '*', then the schedule repeats by day.

- -rp: Specifies the repeat parameter. This parameter must be specified.
  - If the -dom option is specified, then the valid values for -rp are 1–12.
  - If the -wom option is specified, then the valid values for -rp are 1–52.
  - If the -dow option is specified, then the valid values for -rp are 1–366.
- -mb: Specifies the maximum backup parameter. For --vflash maximum backup is 1.

NOTE:
- Avoid using the -l, -u, and -p options with --vFlash option.
- If a backup file is created in a subfolder within the CIFS shared folder, then the subfolder name must be mentioned in the filename option.

Output

Example

Job ID is displayed when the back up or restore operation is successful.

- Back up system to CIFS share and encrypt the data.
  racadm systemconfig backup -f image.img -l //192.168.0/share -u admin -p xxx -n Encryptp@sswd123

- Back up system to NFS share and encrypt the data.
  racadm systemconfig backup -f image.img -l 192.168.0 :/share -u admin -p xxx -n Encryptp@sswd123

- Back up system to vFlash SD.
  racadm systemconfig backup --vFlash

- Restore system from vFlash SD and clear the VD configurations.
  racadm systemconfig restore --vFlash --nopreserve

- Restore system from NFS share without clearing the VD configurations.
  racadm systemconfig restore -f image.img -l 192.168.0:/share -u admin -p xxx

- Create a backup file in a subfolder within the CIFS shared folder.
  racadm systemconfig backup -f rts/Backup.img -l //192.168.0/CIFSshare -u username -p xxx

- To enable or disable AutoBackupScheduler.
  racadm set lifecyclecontroller.lcattributes.autobackup 1
  racadm set lifecyclecontroller.lcattributes.autobackup 0

- AutoBackup system to CIFS share and encrypt the data.
  racadm systemconfig backup -f image.img -l //192.168.0/share -u admin -p xxx -n encryptpasswd123 -time 14:30 -dom 1 -rp 6 -mb 10

- AutoBackup system to NFS share and encrypt the data.
  racadm systemconfig backup -f image.img -l 192.168.0:/share -u admin -p xxx -n encryptpasswd123 -time 14:30 -dom 1 -rp 6 -mb 20

- AutoBackup system to vFlash SD.
  racadm systemconfig backup --vFlash -time 10:30 -wom 1 -dow mon -rp 6 -mb 1
systemerase

Description
Allows you to erase the components to remove the server from use.

Synopsis
- To erase a specific component.
  racadm systemerase <component>
- To erase multiple components.
  racadm systemerase <component>,<component>,<component>

Input
- <component> — the valid types of components are:
  - bios
  - diag
  - drvpack
  - idrac
  - lcdata

Examples
- racadm systemerase bios
- racadm systemerase diag
- racadm systemerase drvpack
- racadm systemerase idrac
- racadm systemerase lcdata
- racadm systemerase bios,diag,drvpack
- racadm systemerase bios,idrac,lcdata

systemperfstatistics

Description
Allows you to view and manage the system performance monitoring operations.

Synopsis
- To view the FQDD's of system performance monitoring sensors
  racadm systemperfstatistics view
- To list the usage statistics of a specific sensor
  racadm systemperfstatistics <sensor_FQDD>
- To reset the utilization peaks of system performance monitoring sensors
  racadm systemperfstatistics PeakReset <FQDD>
- To run the peakreset operation you must have configure IDRAC privilege.

Examples:
- To view the FQDD's of system performance monitoring sensors
  racadm systemperfstatistics view
    [key = iDRAC.Embedded.1#SystemBoardCPUUsageStat]
    [key = iDRAC.Embedded.1#SystemBoardIOUsageStat]
    [key = iDRAC.Embedded.1#SystemBoardMEMUsageStat]
    [key = iDRAC.Embedded.1#SystemBoardSYSUsageStat]
- To list the usage statistics of a specific sensor
  racadm systemperfstatistics iDRAC.Embedded.1#SystemBoardCPUUsageStat
Minimum Readings
Last Hour = 0% [At Mon, 05 May 2014 17:13:04]
Last Day = 0% [At Mon, 05 May 2014 15:59:53]
Last Week = 0% [At Mon, 05 May 2014 15:59:53]

Maximum Readings
Last Hour = 0% [At Thu, 01 Jan 1970 00:00:00]
Last Day = 0% [At Thu, 01 Jan 1970 00:00:00]
Last Week = 0% [At Thu, 01 Jan 1970 00:00:00]

Average Readings
Last Hour
Last Day
Last Week

Peak Readings
Last Week = 0% [At Mon, 05 May 2014 15:58:35]

• To reset the peak utilization of a specific sensor

    racadm systemperfstatistics PeakReset iDRAC.Embedded.1#SystemBoardCPUUsageStat
    RAC1163: The peak utilization value of Out-Of-Band performance monitoring sensor CPU Usage is successfully reset.

**techsupreport**

**Description**

Allows you to perform the technical support report operations. The type of operations are:

• collect — Collects the technical support report data to export. You can specify the various types of logs to be included in the report.
  
  This operation generates a Job ID. Use this Job ID to check the status of the collect operation. To run this operation, you must have the Server Control Commands permission.

• export — Exports the collected Tech Support Report data. To run this subcommand, you must have the Execute Server Control Commands permission.

• getupdatetime — Gets the timestamp of the last operating system application data collection.

• updateosapp — Updates the operating system application data collection. To run this subcommand, you must have the Execute Server Control Commands permission.

**Synopsis**

• To perform the technical support report operation by specifying the type of operation.

    racadm techsupreport <tech support report command type>

• To collect the report data.

    racadm techsupreport collect [-t <type of logs>]

• To export the collected report data.

    racadm techsupreport export -l <CIFS or NFS share> -u <username> -p <password>

• To get the timestamp of the last operating system application data collection.

    racadm techsupreport getupdatetime

• To update the operating system application data collection.

    racadm techsupreport updateosapp -t <type of OS App logs>

• To export the collected report data to local share.

    racadm techsupreport export -f <filename>

**Input**

• -t — type of logs. You can specify any of the following values separated by a ‘,’ (comma)

    • SysInfo — System Information
    • OSAppNoPII — Filtered OS and Application data
• OSAppAll — OS and Application data
• TTYLog — TTYLog data

**NOTE:**
- For updating the operating system application data collection, enter the value OSAppNoPII or OSAppAll to the -t option.
- If no value is specified then system information data is collected.
- To perform the Oslog collection, make sure that ISM is installed and running.
- TTYLog includes PCIeSSD data.
- -l — network share location to export the report
- -u — user name for the remote share to export the report
- -p — password for the remote share to export the report
- -f — target filename for the exported log.

**Examples**
- To collect the system information data.
  racadm techsupreport collect -t <type of logs>
- To collect the system information and TTYLog data.
  racadm techsupreport collect -t SysInfo,TTYLog
- To collect the operating system application data.
  racadm techsupreport collect -t OSAppAll
- To export the collected Tech Support Report, to a CIFS share.
  racadm techsupreport export -l //192.168.0/share -u myuser -p xxx
- To export the collected Tech Support Report, to an NFS share.
  racadm techsupreport export -l 192.168.0:/share
- To export the collected Tech Support Report to the local file system.
  racadm techsupreport export -f tsr_report.zip

**testemail**

**Description**
Sends a test email from iDRAC to a specified destination. Prior to running the test email command, make sure that the SMTP server is configured.

The specified index in the **idrac.EmailAlert** group must be enabled and configured properly. For more information, see the [Integrated Dell Remote Access Controller (iDRAC8) and iDRAC7 RACADM Command Line Interface Reference Guide](dell.com/support/manuals).

**Synopsis**
racadm testemail -i <index>

**Input**
- -i <index> — Specifies the index of the email alert to test.

**Output**
Success: Test e-mail sent successfully
Failure: Unable to send test e-mail

**Example**
Commands for the **idrac.EmailAlert** group:
- Enable the alert.
  racadm set idrac.EmailAlert.1.Enable 1
- Set the destination email address.
  racadm set idrac>EmailAlert.1.Address user1@mycompany.com
- Set the custom message that is sent to the destination email address.
  racadm set idrac.emailalert.1.CustomMsg "This is a test!"
- Make sure that the SMTP IP address is configured properly.
  `racadm set idrac.remotehosts.SMTPServerIPAddress 192.168.0` 
- View the current email alert settings.
  `racadm get idrac.EmailAlert.<index>`
  where `<index>` is a number from 1 to 8.

**testtrap**

**Description**
Tests the RAC’s SNMP trap alerting feature by sending a test trap from iDRAC to a specified destination trap listener on the network.
To run this subcommand, you must have the **Test Alert** permission.

**NOTE:**
- Before you run the `testtrap` subcommand, make sure that the specified index in the RACADM `iDRAC.SNMP.Alert` group is configured properly.
- The indices of `testtrap` subcommand is co-related to the indices of `iDRAC.SNMP.Alert` group.

**Synopsis**
```
racadm testtrap -i <index>
```

**Input**
- `-i <index>` — Specifies the index of the trap configuration that must be used for the test. Valid values are from 1 to 4.

**Example**
- Enable the alert.
  ```
  racadm set idrac.emailalert.1.CustomMsg 1
  racadm set iDRAC.SNMP.Alert.1.Enable 1
  ```
- Set the destination email IP address.
  ```
  racadm set iDRAC.SNMP.Alert.1.DestIpAddr 192.168.0
  ```
- View the current test trap settings.
  ```
  racadm get iDRAC.SNMP.Alert.<index>
  ```
  where `<index>` is a number from 1 to 8

**testalert**

**Description**
Tests FQDN supported SNMP trap notifications.
To run this subcommand, you must have the **Test Alert User Access**.

**Synopsis**
```
racadm testalert -i <index>
```

**Input**
- `-i` — Specifies the index of the trap test. `index` must be an integer from 1 to 8 on iDRAC.

**Output**
- Success: Test trap sent successfully
- Failure: Unable to send test trap

**Example**
- Test a trap with index as 1.
  ```
  racadm testalert -i 1
  ```
  Test trap sent successfully.
- Test a trap that has not been configured yet.
  
  ```
  racadm testalert -i 2
  ```
  
  ERROR: Trap at specified index is not currently enabled.

### Traceroute

**Description**
Traces network path of the routers as the packets traverse from the system to a destination IPv4 address. To run this subcommand, you must have the Execute Diagnostic Commands permission.

**Synopsis**

```bash
racadm traceroute <IPv4 address>
```

**Input**

- **IPv4** — Specifies IPv4 address.

**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 as the packets traverse from the system to a destination IPv6 address. To run this subcommand, you must have the Execute Diagnostic Commands permission.

**Synopsis**

```bash
racadm traceroute6 <IPv6address>
```

**Input**

- `<IPv6address>` — Specifies IPv6 address.

**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
```

### Update

**Description**
Allows you to update the firmware of devices on the server. The supported firmware image file types are:

- **.exe** — Windows-based Dell Update Package (DUP)
- **.d7**
- **.pm**

The supported catalog files are:

- **.xml**
- **xml.gzip**

**NOTE:** Updating the platforms from the repository is not supported for IPv6.
NOTE: Depending on the network traffic, the HTTP packet transfer may fail if you perform update operation from a remote RACADM through a local share. In such cases, retry the operation. If the issue persists, use remote RACADM with the CIFS or NFS share.

Synopsis

```
racadm update -f <updatefile> [--reboot]
racadm update -f <updatefile> -l <Remote CIFS Share> -u <username for CIFS share> -p <password for CIFS share> [--reboot]
racadm update -f <updatefile> -l <Remote NFS Share> [--reboot]
racadm update -f <catalog file> -t <Repository type> -l <Remote CIFS/NFS Share> -u <username for CIFS share> -p <password for CIFS share> [-a <FALSE|TRUE>] [--verificatalog]
racadm update -f <catalog file> -t <Repository type> -l <Remote CIFS/NFS Share> -u <username for CIFS share> -p <password for CIFS share>
racadm update –f <catalog file> -t <Repository type> –e <FTP server with the path to the catalog file> [-a <FALSE|TRUE>] [--verificatalog]
racadm update viewreport
```

Input

- `-f` — Update filename for Windows DUP, `.d7`, `.pm`, `.pm` only.
  For update from repository `.xml` files are allowed.
  If a file name is not specified for repository update, then the `Catalog.xml` is taken as default.
- `-u` — Specifies user name of the remote share that stores the update file. Specify user name in a domain as domain/username.
- `-p` — Specifies password of the remote share that stores the update file.
- `-l` — Specifies network share location that stores the update file. For more information about NFS or CIFS share, see the Usage examples section.
- `-a` — This option indicates whether or not the server must be restarted after the update from repository operation completes. It takes TRUE and FALSE as options. These options are case-insensitive.
- `-t` — Type of repository being used for update. The valid options are FTP, CIFS, NFS, TFTP, and HTTP. These options are case-insensitive. If the repository update functionality is invoked, then this option must be run.
- `-e` — Specifies the server path for the FTP.
- `--verificatalog` — Tests the list of DUPs that are applied and generates a report.
- `--reboot` — Performs a graceful system reboot after the firmware update.
- `-ph` — Specifies the IP address of the proxy server.
- `-pp` — Specifies the password for proxy credentials.
- `-pu` — Specifies the user name for proxy credentials.
- `-po` — Specifies the port for proxy server.
- `-pt` — Specifies the proxy type. Valid values are HTTP and HTTPS. These values are case-insensitive.

NOTE:

- If the repository has to be through a proxy, then the proxy server address, proxy username and the proxy password must be specified.
- The Lifecycle Controller must be enabled for repository update.

Output

Firmware update job for `<filename>` is initiated.

This firmware update job may take several minutes to complete depending on the component or firmware being updated. To view the progress of the job, run the `racadm jobqueue view` command.

For repository update command, the output is:

```
Update from repository operation has been initiated. Check the progress of the operation using "racadm jobqueue view -i JID_80936463532" command.
```
For devices that perform update process without rebooting the host, the update status changes from
Downloading to Completed. For devices that require host reboot to perform update process, the update status
changes from Downloading to Scheduled. When the status is displayed as Scheduled, reboot the host to
start the update process.

The following devices require host reboot to perform the update process:

- Backplanes
- BIOS
- Complex programmable logic device (CPLD)
- Hard disk drives
  - Solid state drives (SSD)
- Network interface cards (NIC) or Fibre Channel (FC) cards
- PCIe SSD devices
- Power supply unit (PSU)
- Storage controllers

Example

- Upload the update file from a remote CIFS share.
  ```
  racadm update -f temp_file.exe -u admin -p xxx -l //1.2.3.4/share
  ```
- Upload the update file from a remote CIFS share and perform a graceful system reboot after the firmware
  update:
  ```
  racadm update -f <updatefile> -u admin -p mypass -l //1.2.3.4/share --reboot
  ```
- Upload the update file from a remote NFS share:
  ```
  racadm update -f temp_file.exe -l //1.2.3.4/share
  ```
- Upload the update file from a remote NFS share and perform a graceful system reboot after the firmware
  update:
  ```
  racadm update -f <updatefile> -l 1.2.3.4:/share --reboot
  ```
- Upload the update file from the local file system using Local RACADM.
  ```
  racadm update -f temp_file.exe
  ```
- Upload the update file from the local file system using local racadm and perform a graceful system reboot after
  the firmware update:
  ```
  racadm update -f <updatefile> --reboot
  ```
- Upload the update file from a remote CIFS share and under a user domain "dom".
  ```
  racadm update -f temp_file.exe -u dom/admin -p xxx -l //1.2.3.4/share
  ```
- Perform update from a CIFS repository and to apply the updates, reboot the server.
  ```
  racadm update -f Catalog.xml -l //192.168.0/Repo -u test -p xxx -a TRUE -t CIFS
  ```
- Generate a comparison report using the available updates in the repository.
  ```
  racadm update -f Catalog.xml -l 192.168.0:/Repo -t NFS -a FALSE --verifycatalog
  ```
- Perform update from an FTP repository and to apply the updates, reboot the server.
  ```
  racadm update -f Catalog.xml -e 192.168.0/Repo/MyCatalog -a TRUE -t FTP
  ```
- Perform update from an FTP repository through a proxy server.
  ```
  racadm update -f Catalog.xml -e 192.168.0/Repo/MyCatalog -a TRUE -ph 192.168.0 -pu prxyuser -pp prxypass -po 80 -pt http -t FTP
  ```
  ```
  racadm update -f Catalog.xml.gz -e ftp.dell.com/Catalog -a TRUE -t FTP
  ```
- View the comparison report generated.
  ```
  racadm update viewreport
  ComponentType  = Firmware
  ElementName    = PERC H730P Mini
  FQDD           = RAID.Integrated.1-1
  Current Version = 25.2.1.0025
  Available Version = 25.2.1.0029
Perform update from an FTP repository with authentication and reboot the server to apply the updates.

```
racadm update -f Catalog.xml -e 192.168.11.0/Repo/MyCatalog -u user -p xxx\n -a TRUE -t FTP
```

Perform update from a HTTP repository and restart the server to apply the updates.

```
racadm update -f Catalog.xml -e 192.168.0/Repo/MyCatalog -a TRUE -t HTTP
```

Perform update from a TFTP repository and restart the server to apply the updates.

```
racadm update -f Catalog.xml -e 192.168.0/Repo/MyCatalog -a TRUE -t TFTP
```

**usercertupload**

**Description**
Uploads a user certificate or a user CA certificate from the client to iDRAC. To run this subcommand, you must have the Configure iDRAC permission.

**Synopsis**
```
racadm usercertupload -t <type> [-f <filename>] -i <index>
```

**Input**
- `-t` — Specifies the type of certificate to upload, either the CA certificate or server certificate.
  - `1` = user certificate
  - `2` = user CA certificate
- `-f` — Specifies the filename of the certificate that must be uploaded. If the file is not specified, the `sslcert` file in the current directory is selected.
- `-i` — Index number of the user. Valid values 2–16.

**Output**
If upload is successful, the message *User certificate successfully uploaded to the RAC.* If unsuccessful, appropriate error message is displayed.

**Example**
To upload user certificate for user 6.
```
racadm usercertupload -t 1 -f c:\cert\cert.txt -i 6
```

**usercertview**

**Description**
Displays the user certificate or user CA certificate that exists on iDRAC.

**Synopsis**
```
racadm usercertview -t <type> [-A] -i <index>
```

**Input**
- `-t` — Specifies the type of certificate to view, either the user certificate or the user CA certificate.
  - `1` = user certificate
  - `2` = user CA certificate
- `-A` — Prevents printing headers or labels.
- `-i` — Index number of the user. Valid values are 2–16.

**Example**
To view user certificate for user 6.
```
racadm usercertview -t 1 -i 6
```

Serial Number : 01

Subject Information:
Country Code (CC) : US
State (S) : Texas
Locality (L) : Round Rock
Organization (O) : Dell Inc.
Common Name (CN) : iDRAC default certificate
vflashsd

Description
Allows you to initialize or get the status of the vFlash SD card. The initialize operation removes all the existing partitions and resets the card.

The status operation displays the status of the last operation performed on the card.

To run this subcommand, you must have the Access Virtual Media privilege.

NOTE: After you restart the iDRAC, the status of the previous initialize operation is erased.

Synopsis
- racadm vflashsd initialize
- racadm vflashsd status

Input
- Initialize — performs initialize operation on SD card.
- Status — indicates to view the progress or status report of the initialize operation.

Output
If initialization is in progress, the message Initialization of the vFlash SD Card is now in progress is displayed. If unsuccessful, appropriate error message is displayed.

If the status of the last operation performed is successful, the message LastAction Progress Status=============Initialize SD Card 100 % Complete is displayed. If unsuccessful, appropriate error message is displayed.

vflashpartition

Description
Manages the partitions on the vFlash SD card.

NOTE:
- To run this subcommand, you must have the iDRAC Enterprise license.
- After iDRAC restart, the status of the previous operation performed on the partition(s) is erased.

Synopsis
racadm vflashpartition <create | delete | status | list> -i<index> -o<label> -e<emulation type> -s<size> -f=format type> -t<partition type> -l<path> -u<user> -p<password> -a

Input
- -o — Label that is displayed when the partition is mounted on the operating system. This option must be a string of up to six alphanumeric characters. VFLASH is the only accepted volume label for non-Dell SD card.
- -e — Emulation type must be either floppy, CD, DVD, or HDD.
- -s — Partition size in MB.
- -f — Format type for the partition based on the type of the file system. Valid options are raw, ext2, ext3, fat16, and fat32.
- -t — Create a partition of the following type:
  - empty — Creates an empty partition
• image — Creates a partition using an image relative to iDRAC.

**NOTE:** Creating an empty partition with emulation type as floppy with ext2 format type by using the Telnet session might result in a state where the partition creation status is shown as zero. If this happens then it is recommended to remove the SD card and format it in order to reuse.

Creation of a partition may be unsuccessful if:
- The network share is not reachable.
- The user name or password provided is not correct.
- The file provided does not exist.
- The memory available on the SD card is lesser than size of the image file.
- -l — Specifies the remote path relative to iDRAC.
- -u — User name for accessing the remote image.
- -p — Password for accessing the remote image.
- -a — Display the status of operations on all the existing partitions.
- list — Lists the existing partitions and its properties.

**Example**

- Create a 20MB empty partition.
  ```
  racadm vflashpartition create -i 1 -o Drive1 -e hdd -t empty -f fat16 -s 20
  ```

- Create a partition from a remote image.
  ```
  racadm vflashpartition create -i 1 -o Drive1 -e cddvd -t image -l
  //ipaddress/sharefolder/isocimge.iso -u username -p xxx
  ```

A new partition is created. By default, the created partition is read-only. This command is case-sensitive for the image filename extension. If the filename extension is in uppercase, for example FOO.ISO instead of FOO.iso, then the command returns a syntax error.

**NOTE:**
- This feature is not supported in Local RACADM.
- Creating vFlash partition from an image file on the CFS or NFS IPv6 enabled network share is not supported.

- Delete a partition.
  ```
  racadm vflashpartition delete -i 1
  ```

- Status of operation on partition 1.
  ```
  racadm vflashpartition status -i 1
  ```

- Status of all the existing partitions.
  ```
  racadm vflashpartition status -a
  ```

- List all the existing partitions and its properties.
  ```
  racadm vflashpartition list
  ```

---

**vmdisconnect**

**Description**

Allows you to end another Virtual Media session. After the session ends, the web-based interface reflects the correct connection status.

Enables an iDRAC user to disconnect all active Virtual Media sessions. The active Virtual Media sessions are displayed on iDRAC web-based interface or by running the RACADM subcommands remoteimage or getssninfo.

To run this subcommand, you must have the Access Virtual Media permission.

**Synopsis**

```
racadm vmdisconnect
```
iDRAC Property Database Group and Object Descriptions

The iDRAC property database contains the configuration information for iDRAC. Associated object is organizing data, and object group is organizing object. The IDs for the groups and objects that the property database supports are listed in this section for iDRAC Enterprise on Blade Servers and iDRAC Enterprise or Express on Rack and Tower Servers.

To configure iDRAC, use the group and object IDs with the RACADM subcommands.

NOTE: You can configure a setting that does not have a hash symbol (#) as the prefix in its output name. To modify a configurable object, use the –o option.

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.

Topics:
- Displayable Characters
- idRacInfo
- cfgStaticLanNetworking
- cfgRemoteHosts
- cfgUserAdmin
- cfgEmailAlert
- cfgSessionManagement
- cfgSerial
- cfgOobSnmp
- cfgRacTuning
- ifcRacManagedNodeOs
- cfgRacVirtual
- cfgServerInfo
- cfgActiveDirectory
- cfgLDAP
- cfgLdapRoleGroup
- cfgStandardSchema
- cfgThermal
- cfgIpmiSol
- cfgIpmiLan
- cfgIpmiPetipv6
- cfgIpmiPef
- cfgIpmiPet
Displayable Characters

Displayable characters include the following set:

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

The following table provides an overview of the object groups applicable for iDRAC Enterprise on Blade Servers and iDRAC on Rack and Tower Servers.

<table>
<thead>
<tr>
<th>Subcommand</th>
<th>iDRAC on Blade Servers</th>
<th>iDRAC on Rack and Tower Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>idRacInfo</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgStaticLanNetworking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cfgRemoteHosts</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgUserAdmin</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgEmailAlert</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgSessionManagement</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgSerial</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgOobSnmp</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgRacTuning</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ifcRacManagedNodeOs</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgRacVirtual</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgServerInfo</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Subcommand</td>
<td>iDRAC on Blade Servers</td>
<td>iDRAC on Rack and Tower Servers</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>cfgActiveDirectory</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgLDAP</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgLdapRoleGroup</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgStandardSchema</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgThermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cfgIpmiSol</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgIpmiLan</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgIpmiPetipv6</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgIpmiPetef</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgIpmiPet</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgUserDomain</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgServerPower</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgServerPowerSupply</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgIPv6LanNetworking</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgIPv6StaticLanNetworking</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgIPv6URL</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgIpmiSerial</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgSmartCard</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgNetTuning</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgSensorRedundancy</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgVFlashSD</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgVFlashPartition</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgLogging</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cfgRacSecurity</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**idRacInfo**

This group contains display parameters to provide information about the specifics of iDRAC being queried. One instance of the group is allowed.

The following sections provide information about the objects in the `idRACInfo` group.
idRacProductInfo (Read Only)

Description  A text string that identifies the product.
Legal Values A string of up to 63 ASCII characters.
Default  iDRAC – Integrated Dell Remote Access Controller

idRacDescriptionInfo (Read Only)

Description  A text description of the RAC type.
Legal Values A string of up to 255 ASCII characters.
Default  This system component provides a complete set of remote management functions for Dell PowerEdge servers.

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  The current iDRAC 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  iDRAC
iDRAC Type (Read Only)

**Description**
Identifies the remote access controller type.

**Legal Values**
Product ID

**Default**
- For 10G iDRAC: 8
- For 11G iDRAC6 on Rack and Tower Servers: 10
- For 11G iDRAC6 Enterprise on Blade Servers: 11
- For 12G iDRAC on Rack and Tower Servers: 16
- For 12G iDRAC Enterprise on Blade Servers: 17

**Example**

```
racadm getconfig -g idRacInfo
# idRacType=8
# idRacProductInfo=Chassis Management Controller
# idRacDescriptionInfo=This system component provides a complete set of remote management functions for blade servers
# idRacVersionInfo=P21
# idRacBuildInfo=200708301525
# idRacName=CMC-1
```

```
racadm getconfig -g idRacInfo
# idRacType=16
# idRacProductInfo=Integrated Dell Remote Access Controller
# idRacDescriptionInfo=This system component provides a complete set of remote management functions for Dell PowerEdge Servers
# idRacVersionInfo=1.06.06
# idRacBuildInfo=15
# idRacName=idrac-GSRS3V1
```

cfgStaticLanNetworking

This group contains parameters to configure the device NIC for IPv4.

**NOTE:** A few objects in this group may require the device NIC to be reset, that may cause a brief loss in connectivity.

cfgNicStaticEnable (Read or Write)

**Description**
Enables or disables the NIC.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default**
1 — Enabled

**NOTE:** If this object is modified, then the object cfgNicEnable is also modified.
cfgNicStaticIPv4Enable (Read or Write)

Description: Enables or disables the IPv4 stack.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default: 1 — Enabled

NOTE: If this object is modified, then the object cfgNicIPv4Enable is also modified.

cfgNicStaticIpAddress (Read or Write)

Description: Returns or sets the current IPv4 address.

NOTE: Only set the current IPv4 address if cfgNicUseDhcp is set to 0 (false).

Legal Values: Any Valid IPv4 address

Default: 192.168.0

cfgNicStaticUseDhcp (Read or Write)

Description: Specifies whether DHCP is used to configure the IPv4 network.

Legal Values:
- 0 — IP Address, subnet mask and gateway are configured on the device.
- 1 — IP Address, subnet mask and gateway are assigned from the DHCP server.

Default: 0 — Do not use DHCP

NOTE: If this object is modified, then the object cfgNicUseDhcp is also modified.

cfgNicStaticNetmask (Read or Write)

Description: Returns or sets the static IPv4 Netmask.

NOTE: Only set the current IPv4 netmask, if cfgNicUseDhcp is set to 0 (false).

Legal Values: Any Valid IPv4 Netmask

Default: 255.255.255.0
cfgNicStaticGateway (Read or Write)

Description
Returns or sets the static IPv4 address.

Legal Values
Any Valid IPv4 address

Default
192.168.0.120

cfgDNSStaticServersFromDHCP (Read or Write)

Description
Specifies the DNS server static IP addresses.

Legal Values

- DNS Addresses are configured on the Device
- DNS Addresses are assigned via DHCP

Default
0

cfgDNSStaticServer1 (Read or Write)

Description
Specifies the IP address for DNS server 1.

NOTE: This property is only valid if cfgDNServersFromDHCP is set to 0 (FALSE).

Legal Values

- 0 — IP Address, subnet mask and gateway are configured on the device.
- 1 — IP Address, subnet mask and gateway are assigned from the DHCP server.

Default
0 — Do not use DHCP

NOTE: If this object is modified, then the object cfgNicUseDhcp is also modified.

cfgDNSStaticServer2 (Read or Write)

Description
Specifies the static IP address for DNS server 2.

Legal Values
A Valid IPv4 Address

Default
0.0.0.0
cfgDNSStaticDomainName (Read or Write)

Description
The DNS static domain name.

Legal Values
String of up to 254 ASCII characters. Characters are restricted to alphanumeric, hyphens and periods. At least one of the characters must be alphabetic.

NOTE: Microsoft Active Directory only supports Fully Qualified Domain Names (FQDN) of 64 characters or fewer lengths.

Default
Null

cfgDNSStaticDomainNameFromDHCP (Read or Write)

Description
Specifies the device DNS static domain name.

Legal Values
• 0 — Do not use DHCP to get the Domain Name
• 1 — Use DHCP to get the Domain Name

Default
0 — Disabled

cfgRemoteHosts

This group provides properties that allow configuration of the SMTP server for email alerts.

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

Use this object with the config or getconfig subcommands.

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

cfgRhostsFwUpdateTftpEnable (Read or Write)

Description
Enables or disables firmware update from a network TFTP server.

NOTE: This object is read-only for iDRAC Modular servers.

Legal Values
• 1 — (TRUE)
• 0 — (FALSE)

Default
1
cfgRhostsFwUpdateIpAddr (Read or Write)

Description: Specifies the network TFTP server IPv4 or IPv6 address that is used for TFTP firmware update operations.

Legal Values: A string representing a valid IPv4 or IPv6 address. For example, 192.168.0.61

Default: For IPv4, it is 0.0.0.0

cfgRhostsFwUpdatePath (Read or Write)

Description: Specifies TFTP path where firmware image file exists on the TFTP server. The TFTP path is relative to the TFTP root path on the TFTP server.

NOTE: The server may still require you to specify the drive (for example, C:).

Legal Values: A string with a maximum length of 255 ASCII characters.

Default: <blank>

cfgRhostsSmtpServerIpAddr (Read or Write)

Description: The IPv4 or IPv6 address of the network SMTP server. The SMTP server transmits email alerts from iDRAC if the alerts are configured and enabled.

Legal Values: A string representing a valid SMTP server IPv4 or IPv6 address. For example: 192.168.0.2.

Default: For IPv4, it is 0.0.0.0

cfgRhostsSyslogEnable (Read or Write)

Description: To allow the RAC and SEL logs to be written to up to three remote syslog servers. Enables or disables remote syslog.

Legal Values: 1 (TRUE) 0 (FALSE)

Default: 0

cfgRhostsSyslogPort (Read or Write)

Description: Remote syslog port number to use for writing the RAC and SEL logs to a remote syslog server.

Legal Values: 10–65535
cfgRhostsSyslogServer1 (Read or Write)

Description: To store the RAC and SEL logs specify the first of three possible remote syslog servers. This property is only valid if cfgRhostsSyslogEnable is set to 1 (enabled).

Legal Values: String from 0 to 63 characters.

Default: <blank>

cfgRhostsSyslogServer2 (Read or Write)

Description: To store the RAC and SEL logs Specify the second of three possible remote syslog servers. This property is only valid if cfgRhostsSyslogEnable is set to 1 (enabled).

Legal Values: String from 0 to 63 characters.

Default: <blank>

cfgRhostsSyslogServer3 (Read or Write)

Description: To store the RAC and SEL logs specify the third of three possible remote syslog servers. This property is only valid if cfgRhostsSyslogEnable is set to 1 (enabled).

Legal Values: String from 0 to 63 characters.

Default: <blank>

cfgUserAdmin

This group provides configuration information about the users allowed to access iDRAC through the available remote interfaces.

Up to 16 instances of the user group are allowed. Each instance represents the configuration for an individual user.

Use this object with the `config` or `getconfig` subcommands. To use the command as follows: `-i <index group>`, supply an index group number.

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

cfgUserAdminIndex (Read Only)

Description: The unique index of a user.

Legal Values: This parameter is populated based on the existing instances.

Default: <index of the instance>
cfgUserAdminIpmiLanPrivilege (Read or Write)

**Description**
The maximum privilege on the IPMI LAN channel.

**Legal Values**
- 2 (User)
- 3 (Operator)
- 4 (Administrator)
- 15 (No access)

**Default**
- 4 (User 2)
- 15 (All others)

cfgUserAdminIpmiSerialPrivilege (Read or Write)

**Description**
The maximum privilege on the IPMI LAN channel.
This object is applicable only for iDRAC on Rack and Tower Servers and not for iDRAC Enterprise on Blade Servers.

**Legal Values**
- 2 (User)
- 3 (Operator)
- 4 (Administrator)
- 15 (No access)

**Default**
- 4 (User 2)
- 15 (All others)

cfgUserAdminPrivilege (Read or 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 to 0x000001ff, 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>Log in 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>
<tr>
<td>Clear Logs Administrator</td>
<td>0x00000008</td>
</tr>
<tr>
<td>Chassis Control Administrator</td>
<td>0x00000010</td>
</tr>
<tr>
<td>Super User</td>
<td>0x00000020</td>
</tr>
<tr>
<td>Server Administrator</td>
<td>0x00000040</td>
</tr>
<tr>
<td>Test Alert User</td>
<td>0x00000080</td>
</tr>
<tr>
<td>Debug Command Administrator</td>
<td>0x00000100</td>
</tr>
<tr>
<td>Fabric A Administrator</td>
<td>0x00000200</td>
</tr>
<tr>
<td>Fabric B Administrator</td>
<td>0x00000400</td>
</tr>
</tbody>
</table>
### Examples

The following table provides sample privilege bit masks for users with one or more privileges.

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

### cfgUserAdminUserName (Read or Write)

**Description**

The name of the user for this index. Writing a string of double quotation mark (" ") disables the user. The string cannot contain / (forward slash), \ (backward slash), . (period), @ (at symbol), quotation marks, ; (semicolon), or ' (backward quotation mark).

**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 or 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: 1 (User 2), 0 (All others)

cfgUserAdminSolEnable (Read or Write)

Description: Enables or disables Serial Over LAN (SOL) user access for the user.

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

Default: 0

cfgEmailAlert

This group contains parameters to configure iDRAC email alerting capabilities. Up to four instances of this group are allowed.

Use this object with the config or getconfig subcommands.

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 or Write)

Description: Enables or disables the alert instance.

Legal Values:
- 1 (TRUE)
- 0 (FALSE)
cfgEmailAlertAddress (Read or Write)

Description: Specifies the destination email address for email alerts, for example, user1@company.com.

Legal Values: Email address format, with a maximum length of 64 ASCII characters.

Default: <blank>

cfgEmailAlertCustomMsg (Read or Write)

Description: Specifies a custom message that forms the subject of the alert.

Legal Values: A string of up to 32 characters

Default: <blank>

cfgEmailAlertEmailName (Read Only)

Description: Specifies name or other identifier associated with the destination email address. The email 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 iDRAC. One instance of the group is allowed. Displays current settings for and configures the idle timeout properties for web server, Telnet, SSH and RACADM sessions. Changes to idle time out settings take effect at the next login. To disable the idle time out property for a connection, set this property to 0.

To apply this setting to iDRAC, use the —m option

The following sections provide information about the objects in the cfgSessionManagement group.
**cfgSsnMgtRacadmTimeout (Read or 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**
10–1920

**Default**
60

**Example**
racadm getconfig -g cfgSessionManagement
cfgSsnMgtWebserverTimeout=0
cfgSsnMgtTelnetIdleTimeout=0
cfgSsnMgtSshIdleTimeout=1800
cfgSsnMgtRacadmTimeout=0

**cfgSsnMgtConsRedirMaxSessions (Read or Write)**

**Description**
Specifies the maximum number of Virtual Console sessions allowed on iDRAC.

**Legal Values**
1–4

**Default**
4

**cfgSsnMgtWebserverTimeout (Read or 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 canceled if the time limit exceeds this property. Changes to this setting do not affect the current session. 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

**cfgSsnMgtSshIdleTimeout (Read or Write)**

**Description**
Defines the secure shell idle 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 canceled if the time limit exceeds this property. Changes to this setting do not affect the current session; log out and log in again to make the new settings effective.

An expired secure shell session displays the following error message:

- For iDRAC on Rack and Tower Servers: Connection timed out
- For iDRAC Enterprise on Blade Servers: Session timed out. Closing the session.
After the message is displayed, the system returns to the shell that generated the Secure Shell session.

**Legal Values**
- 0 — (No timeout)
- 60–10800

**NOTE:** If 0 (no timeout), the network connection does not send alive packets to probe the client. Otherwise, keep alive packets are sent to guarantee that the client is responding.

**Default**
- For iDRAC on Rack and Tower Servers: 300
- For iDRAC Enterprise on Blade Servers: 1800

### cfgSsnMgtTelnetIdleTimeout (Read or Write)

**Description**
Defines the Telnet idle timeout. 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 canceled if the time limit exceeds this property. 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 Telnet session displays the following error message:
- For iDRAC on Rack and Tower Servers: Connection timed out
- For iDRAC Enterprise on Blade Servers: Session timed out. Closing the session.

After the message is displayed, the system returns you to the shell that generated the Telnet session.

**Legal Values**
- 0 (No timeout)
- 60–10800

**NOTE:** If 0 (no timeout is specified), the network connection does not send alive packets to probe the client. Otherwise, keep alive packets are sent to guarantee that the client is responding.

**Default**
- For iDRAC on Rack and Tower Servers: 300
- For iDRAC Enterprise on Blade Servers: 1800

### cfgSerial

This group contains configuration parameters for the serial configuration. One instance of the group is allowed.

Use this object with the `config` or `getconfig` subcommands.

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

**NOTE:** The `cfgSerial` object group is applicable for iDRAC Enterprise on Blade Servers for only two properties — `cfgSerialTelnetEnable=1` and `cfgSerialSshEnable=1`.

### cfgSerialBaudRate (Read or Write)

**Description**
Sets the baud rate on the serial port.

**Legal Values**
9600, 19200, 57600, 115200
cfgSerialConsoleEnable (Read or Write)

Description: Enables or disables the serial console interface.

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

Default: 0

cfgSerialConsoleQuitKey (Read or Write)

Description: This key or key combination terminates Virtual Console text for iDRAC when using the console com2 command.

Legal values:
- ^ follows any alphabet (a-z, A-Z)
- ^ follows the listed special characters: [ ] \\ _

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, [\].\n
In the input command, use \ without the quotes. For example:
config -g cfgSerial -o cfgSerialConsoleQuitKey "SHIFT+6"\n
Default: <Ctrl>\n
cfgSerialConsoleIdleTimeout (Read or Write)

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

Legal Values:
- 0 = No timeout
- 60–1920

Default: 300

cfgSerialConsoleNoAuth (Read or Write)

Description: Enables or disables the serial console login authentication.

Legal Values:
- 0 — (enables serial login authentication)
• 1 — (disables serial login authentication)

Default 0

cfgSerialConsoleCommand (Read or Write)

Description Specifies a serial command that is executed after a user logs in to the serial console interface.

Legal Values A string of up to 128 characters.

Default <blank>

cfgSerialHistorySize (Read or Write)

Description Specifies the maximum size of the serial history buffer.

Legal Values 0–8192

Default 8192

cfgSerialCom2RedirEnable (Read or Write)

Description Enables or disables the console for COM 2-port redirection.

The cfgSerialCom2RedirEnable object property is applicable only for iDRAC on Rack and Tower Servers.

Legal Values
• 1 (TRUE)
• 0 (FALSE)

Default 1

cfgSerialHistorySize (Read or Write)

Description Specifies the maximum size of the serial history buffer.

Legal Values 0–8192

Default 8192
**cfgSerialSshEnable (Read or Write)**

- **Description**: Enables or disables the secure shell (SSH) interface.

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

- **Default**: 1

- **Example**

  ```
  racadm getconfig -g cfgSerial
  cfgSerialBaudRate=115200
  cfgSerialConsoleEnable=1
  cfgSerialConsoleQuitKey=^\n  cfgSerialConsoleIdleTimeout=1800
  cfgSerialConsoleNoAuth=0
  cfgSerialConsoleCommand=
  cfgSerialConsoleColumns=0
  cfgSerialHistorySize=8192
  cfgSerialTelnetEnable=0
  cfgSerialSshEnable=1
  ```

**cfgSerialTelnetEnable (Read or Write)**

- **Description**: Enables or disables the Telnet console interface.

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

- **Default**: 0

**cfgOobSnmp**

This group contains parameters to configure the SNMP agent and trap capabilities of iDRAC. One instance of the group is allowed.

The CMC SNMP agent supports the standard RFC1213 mib-2 and the Dell enterprise-specific the MIB.

This group is not applicable for iDRAC on Rack and Tower Servers.

The following sections provide information about the objects in the `cfgOobSnmp` group.
cfgOobSnmpAgentCommunity (Read or Write)

**Description**
Specifies the SNMP Community Name 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 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 or Write)

**Description**
Enables or disables the SNMP agent in iDRAC.

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

**Default**
0

cfgRacTuning
This group is used to configure various configuration properties, such as valid ports and security port restrictions.

Use this object with the `config` or `getconfig` subcommands.

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

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

cfgRacTuneConRedirPort (Read or Write)

**Description**
To use for keyboard, mouse, video and Virtual Media traffic to iDRAC, specify the port.

**Legal Values**
1024–65535

**Default**
5900
cfgRacTuneRemoteRacadmEnable (Read or Write)

Description: Enables or disables the Remote RACADM interface.

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

Default: 1

cfgRacTuneCtrlEConfigDisable

Description: To configure iDRAC from the BIOS POST option-ROM, enables or disables the ability of the local user.

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

Default: 0

cfgRacTuneHttpPort (Read or Write)

Description: To use HTTP network communication, specify the port number.

Legal Values: 10–65535

Default: 80

cfgRacTuneHttpsPort (Read or Write)

Description: To use HTTPS network communication, specify the port number.

Legal Values: 10–65535

Default: 443

cfgRacTunEpRangeEnable (Read or Write)

Description: Enables or disables the IPv4 Address Range validation feature.

Legal Values:
- 1 (TRUE)
cfgRacTuneIpRangeAddr (Read or Write)

**Description**
Specifies the acceptable IPv4 address bit pattern in the positions of the "1"s in the range mask property (cfgRacTuneIpRangeMask).

**Legal Values**
An IPv4 address formatted string, for example, 192.168.0.

**Default**
192.168.0

cfgRacTuneIpRangeMask (Read or Write)

**Description**
Standard IP mask values with left-justified bits. For example, 255.255.255.0.

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

**Default**
255.255.255.0

cfgRacTuneSshPort (Read or Write)

**Description**
Specifies the port number used for the SSH interface.

**Legal Values**
1–65535

**Default**
22

cfgRacTuneTelnetPort (Read or Write)

**Description**
Specifies the port number used for the Telnet interface.

**Legal Values**
1–65535

**Default**
23

cfgRacTuneConRedirEnable (Read or Write)

**Description**
Enables or disables Virtual Console.

**Legal Values**
- 1 (TRUE)
cfgRacTuneConRedirEncryptEnable (Read or Write)

Description: Encrypts the video in a Virtual Console session.

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

Default: 1

cfgRacTuneAsrEnable (Read or Write)

Description: Enables or disables iDRAC last crash screen capture feature.
This object property requires an iDRAC reset before it becomes active.

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

Default: 0

cfgRacTuneDaylightOffset (Read Only)

Description: Specifies the daylight savings offset (in minutes) to use for the RAC Time. This value is 0 if the time zone is not a Daylight Saving time zone.

Legal Values: 0–60

Default: 0

Example:

```
racadm getconfig -g cfgRacTuning [-m server-<n>] -o <object name> <object value>
```

cfgRacTuneRemoteRacadmEnable=1
cfgRacTuneWebserverEnable=1
cfgRacTuneHttpPort=80
cfgRacTuneHttpsPort=443
cfgRacTuneTelnetPort=23
cfgRacTuneSshPort=22
cfgRacTuneIpRangeEnable=0
cfgRacTuneIpRangeAddr=192.168.1.1
cfgRacTuneIpRangeMask=255.255.255.0
# cfgRacTuneTimezoneOffset=-18000
# cfgRacTuneDaylightOffset=3600

## cfgRacTuneTimezoneOffset (Read Only)

**Description**
Specifies the time zone offset (in minutes) from Greenwich Mean Time (GMT) / Coordinated Universal Time (UTC) to use for the RAC Time. Some common time zone offsets for time zones in the United States are:

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

**Legal Values**
–720–7800

**Default**
0

**Example**
racadm getconfig -g cfgRacTuning
cfgRacTuneRemoteRacadmEnable=1
cfgRacTuneWebserverEnable=1
cfgRacTuneHttpPort=80
cfgRacTuneHttpsPort=443
cfgRacTuneTelnetPort=23
cfgRacTuneSshPort=22
cfgRacTuneIpRangeEnable=0
cfgRacTuneIpRangeAddr=192.168.1.1
cfgRacTuneIpRangeMask=255.255.255.0
# cfgRacTuneTimezoneOffset=-18000
# cfgRacTuneDaylightOffset=3600

## cfgRacTuneLocalServerVideo (Read or Write)

**Description**
Enables or disables the local server video.

**Legal Values**

- 1 (TRUE — Enables)
- 0 (FALSE— Disables)

**Default**
1

## cfgRacTuneLocalConfigDisable (Read or Write)

**Description**
Disables write access to iDRAC configuration data.

**NOTE:** Access can be disabled using the local RACADM or iDRAC web interface; however, once disabled, access can be re-enabled only through iDRAC web interface.

**Legal Values**

- 0 (TRUE-Enables)
- 1 (FALSE-Disables)
cfgRacTuneWebserverEnable (Read or Write)

**Description**
Enables or disables the web server. If this property is disabled then it 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

cfgRacTuneVirtualConsoleAuthorizeMultipleSessions (Read or Write)

**Description**
If a first user is already using the Virtual Console, the value of this object affects the privileges granted to the subsequent user’s shared request after the timeout of 30 seconds. This object is applicable only for iDRAC on Rack and Tower Servers and not for iDRAC Enterprise on Blade Servers.

**NOTE:** To modify this property, you must have Configure iDRAC permission. This object can be used only with remote or firmware (SSH or Telnet) RACADM and not with local RACADM or with earlier DRAC products.

**Legal Values**
- 0 — (If the user of the first session has not responded for session sharing request by subsequent user. The next session user gets an access denied error after the default timeout value of 30 seconds.)
- 1 — (If the user of the first session has not responded for session sharing request by subsequent user. The next session user gets a read-only access after the default timeout value of 30 seconds.)
- 2 — (If the user of the first session has not responded for session sharing request by subsequent user. The next session user gets administrator access after default timeout value of 30 seconds.)

**Default** 0

cfgRacTunePluginType (Read or Write)

**Description**
To virtual console from browser, specifies the plug-in type.

**Legal Values**
- 0 = Use Active X /Native Plugin
- 1 = Use Java Plugin

**Default** 0 = Active X /Native Plugin

ifcRacManagedNodeOs

This group contains properties that describe the managed server operating system. One instance of the group is allowed.
The following sections provide information about the objects in the ifcRacManagedNodeOs.

**ifcRacMnOsHostname (Read Only)**

**Description**
The host name of the managed server.

**Legal Values**
A string of up to 255 characters.

**Default**
<blank>

**ifcRacMnOsOsName (Read Only)**

**Description**
The operating system name of the managed server.

**Legal Values**
A string of up to 255 characters.

**Default**
<blank>

**cfgRacVirtual**

This group contains parameters to configure the iDRAC Virtual Media feature. One instance of the group is allowed.

The following sections provide information about the objects in the cfgRacVirtual.

**cfgVirMediaAttached (Read or Write)**

**Description**
This object is used to attach virtual devices to the system via the USB bus. When the devices are attached, the server recognizes valid USB mass storage devices attached to the system. Which is equivalent to attaching a local USB CDROM/floppy drive to a USB port on the system. When the devices are attached, they can be connected to the virtual devices remotely using iDRAC web interface or the CLI. Setting this object to 0 causes the devices to detach from the USB bus.

**NOTE:** Modifying this property does not impact the remote file sharing operation.

**Legal Values**
- 0 = Detach
- 1 = Attach
- 2 = AutoAttach

**Default**
0

**cfgVirtualBootOnce (Read or Write)**

**Description**
Enables or disables the Virtual Media Boot Once feature of iDRAC.
If this property is enabled when the host server is rebooted, this feature attempts to start from the virtual media devices — if the appropriate media is installed in the device.

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

**Default**
0

### cfgVirMediaFloppyEmulation (Read or Write)

**Description**
When set to 0, the virtual floppy drive is recognized as a removable disk by Windows operating systems. Windows operating systems assigns a drive letter that is C: or higher during enumeration. When set to 1, the Virtual Floppy drive is seen as a floppy drive by Windows operating systems. Windows operating systems assigns a drive letter of A: or B:.

1. **NOTE:** Virtual Media has to be reattached (using cfgVirMediaAttached) for this change to take effect.

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

**Default**
0

### cfgSDWriteProtect (Read Only)

**Description**
Displays if the physical write protect latch on the SD card is enabled or disabled.

1. **NOTE:** This command is deprecated from 12G iDRAC 1.0 release onwards. The functionality of this command is covered by cfgVFlashSDWriteProtect. While execution of the cfgSDWriteProtect command is successful, use the cfgVFlashSDWriteProtect command. For more information, see cfgVFlashSDWriteProtect Read Only.

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

**Default**
0

### cfgServerInfo

This group allows you to select the BIOS first boot device and provides the option to start the selected device only once.

Use this object with the config or getconfig subcommands.

The following sections provide information about the objects in the cfgServerInfo.
cfgServerName (Read Or Write)

Description Displays the name of the specified server.
Legal Values Maximum of 15 non-extended (ASCII characters (ASCII codes 32 through 126). For more information, see Guidelines to Quote Strings Containing Special Characters.
Default SLOT — <slot number>

cfgServerNic3MacAddress (Read Only)

Description Displays the MAC address of the server NIC 3.
Legal Values None
Default None

cfgServerNic4MacAddress (Read Only)

Description Displays the MAC address of the server NIC 4.
Legal Values None
Default None

cfgServerDNSIMCName (Read or Write)

Description Displays the DNS domain name for iDRAC or IMC.
Legal Values A valid string values
Default None

cfgServerFirstBootDevice (Read or Write)

Description Sets or displays the first boot device.
You can also set a vFlash partition that is attached as a bootable device. For more information, see cfgVFlashPartitionOSVolLabel.

NOTE: If RFS is configured as the next boot device, during restart, the system starts normally and not from RFS.
NOTE: First attach, to configure vFlash as First Boot Device. When a detached / non-existent vFlash partition or a nonstandard boot device is configured as first boot device, the following error message is displayed:

Invalid object value

**Legal Values**
- No-Override
- PXE
- HDD
- DIAG
- CD-DVD
- BIOS
- vFDD
- VCD-DVD
- iSCSI
- FDD
- SD
- RFS (Remote File Share)
- F10
- F11

**Default**
No-Override

cfgServerBootOnce (Read or Write)

**Description**
Enables or disables the server start once feature.

**Legal Values**
- 1 (True)
- 0 (False)

**Default**
1 (True)

cfgActiveDirectory

This group contains parameters to configure iDRAC Active Directory feature.

Use this object with the config or getconfig subcommands.

The following sections provide information about the objects in the cfgActiveDirectory.

cfgADSSOEnable (Read or Write)

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

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

**Default**
0
cfgADDomainController1 (Read or Write)

Description
To obtain user names, specify the LDAP server from which you want the iDRAC.

Legal Values
A string of up to 254 ASCII characters representing a valid IP address or a fully qualified domain name (FQDN).

Default
None

cfgADDomainController2 (Read or Write)

Description
To obtain user names, specify the LDAP server from which you want the iDRAC.
This object is applicable only to iDRAC.

Legal Values
A string of up to 254 ASCII characters representing a valid IP address or a fully qualified domain name (FQDN).

Default
None

cfgADDomainController3 (Read or Write)

Description
To obtain user names, specify the LDAP server from which you want the iDRAC.
This object is applicable only to iDRAC.

Legal Values
A string of up to 254 ASCII characters representing a valid IP address or a fully qualified domain name (FQDN).

Default
None

cfgADRacName (Read or Write)

Description
Name of iDRAC as recorded in the Active Directory forest.

Legal Values
Any printable text string of up to 254 characters, with no white space.

Default
<blank>

cfgADRacDomain (Read or Write)

Description
Active Directory Domain in which iDRAC resides.

Legal Values
Any printable text string of up to 254 characters, with no white space.

Default
<blank>
cfgADAuthTimeout (Read or Write)

**Description**
To wait for Active Directory authentication requests to complete before timing out, specify the number of seconds.

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

**Legal Values**
15–300 seconds

**Default**
120

cfgADEnable (Read or Write)

**Description**
Enables or disables Active Directory user authentication on iDRAC.

If this property is disabled, only local iDRAC authentication is used for user login.

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

**Default**
0

cfgADType (Read or Write)

**Description**
To use the Active Directory, determine the schema type.

**Legal Values**
- 1 — (Enables Active Directory with the extended schema)
- 2 — (Enables Active Directory with the standard schema)

**Default**
1

cfgADGlobalCatalog1 (Read or Write)

**Description**
To obtain user names, specify the Global Catalog server from which you want the iDRAC.

This object is applicable only to iDRAC.

**Legal Values**
A string of up to 254 ASCII characters representing a valid IP address or a fully qualified domain name (FQDN).

**Default**
None
cfgADGlobalCatalog2 (Read or Write)

Description
To obtain user names, specify the Global Catalog server from which you want the iDRAC. This object is applicable only to iDRAC.

Legal Values
A string of up to 254 ASCII characters representing a valid IP address or a fully qualified domain name (FQDN).

Default
None

cfgADGlobalCatalog3 (Read or Write)

Description
To obtain user names, specify the Global Catalog server from which you want the iDRAC. This object is applicable only to iDRAC.

Legal Values
A string of up to 254 ASCII characters representing a valid IP address or a fully qualified domain name (FQDN).

Default
None

cfgADCertValidationEnable (Read or 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

cfgADDcSRVLookupEnable (Read or Write)

Description
Configures iDRAC to use pre-configured domain controllers or to use DNS to find the domain controller. If using pre-configured domain controllers, then the domain controllers to use are specified under cfgAdDomainController1, cfgAdDomainController2 and cfgAdDomainController3. iDRAC does not failover to the specified domain controllers when DNS lookup is unsuccessful or none of the servers returns to the DNS lookup works. This object is applicable only to iDRAC.

Legal Values
- 1 (TRUE) — use DNS to look up domain controllers
- 0 (FALSE) — use pre-configured domain controllers

Default
0
cfgADDcSRVLookupbyUserdomain (Read or Write)

**Description**
Chooses the way the user domain is looked up for Active Directory.
This object is applicable only to iDRAC.

**Legal Values**
- 1 (TRUE) — use user domain as the search domain to look up DCs. The user domain is chosen from either the user domain list or by entering into the user login.
- 0 (FALSE) — use the configured search domain cfgADDcSrLookupDomainName to look up DCs.

**Default**
1

cfgADDcSRVLookupDomainName (Read or Write)

**Description**
Use the Active Directory Domain when cfgAddcSrvLookupbyUserDomain is set to 0.
This object is applicable only to iDRAC.

**Legal Values**
String. Maximum length = 254

**Default**
Null

cfgADGcSRVLookupEnable (Read or Write)

**Description**
Determines how the global catalog server is looked up. If using pre-configured global catalog servers, then iDRAC uses the values cfgAdGlobalCatalog1, cfgAdGlobalCatalog2 and cfgAdGlobalCatalog3.
This object is applicable only to iDRAC.

**Legal Values**
- 0 (FALSE) — use pre-configured Global Catalog Servers (GCS)
- 1 (TRUE) — use DNS to look up GCS

**Default**
0

cfgADGcRootDomain (Read or Write)

**Description**
The names of the Active Directory root domain used for DNS look up, to locate Global Catalog servers.
This object is applicable only to iDRAC.

**Legal Values**
String. Maximum length = 254

**Default**
Null
### cfgLDAP

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

Use this object with the `config` or `getconfig` subcommands.

The following sections provide information about the objects in the `cfgLDAP`.

#### cfgLDAPEnable (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Enables or disables LDAP service. If this property is disabled, local iDRAC authentication is used for user logins.</th>
</tr>
</thead>
</table>
| Legal Values | • 1 — Enable  
• 0 — Disable |
| Default | 0 |

#### cfgLDAPServer (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Configures the address of the LDAP Server. IPv4 and IPv6 are supported.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>String. Maximum length = 1024</td>
</tr>
<tr>
<td>Default</td>
<td>Null</td>
</tr>
</tbody>
</table>

1. **NOTE**: You can specify multiple servers by separating each server with a comma. For example, `example.com, sub1.example.com`

#### cfgLDAPPort (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Port of LDAP over SSL. Non-SSL port is not supported.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>1–65535</td>
</tr>
<tr>
<td>Default</td>
<td>636</td>
</tr>
</tbody>
</table>

#### cfgLDAPBaseDN (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>The domain name of the branch of the directory where all searches must start.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>String. Maximum length = 254</td>
</tr>
</tbody>
</table>
cfgLDAPUserAttribute (Read or Write)

Description: To search for, specify the user attribute. 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 is unsuccessful with error.

Legal Values: String. Maximum length = 254

Default: Null

cfgLDAPGroupAttribute (Read or Write)

Description: Specifies which LDAP attribute is used to check for group membership. It must be an attribute of the group class. If not specified then the member and unique member attributes are used.

Legal Values: String maximum length = 254

Default: Null

cfgLDAPGroupAttributeIsDN (Read or Write)

Description: When it is set to 1, iDRAC compares the userDN retrieved from the directory to compare to the members of the group. If it is set to 0, the user name provides the login user to compare to the members of the group. It does not affect the search algorithm for the bind. iDRAC always searches the userDN and uses the userDN to bind.

Legal Values:
- 1 (TRUE) — Use the userDN from the LDAP Server
- 0 (FALSE) — Use the userDN to provide the login user

Default: 1

cfgLDAPBindDN (Read or 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. If necessary it is optional to support anonymous bind.

**NOTE:** If cfgLDAPBindDN is [null] and cfgLDAPBindPassword is [null], then the iDRAC attempts an anonymous bind.

Legal Values: String maximum length = 254

Default: Null
**cfgLDAPBindPassword (Write Only)**

**Description**
A bind password is used with the bindDN. The bind password is a sensitive data, and must be protected. It is optional to support anonymous bind.

**Legal Values**
String maximum length = 254

**Default**
Null

**cfgLDAPSearchFilter (Read or Write)**

**Description**
To validate LDAP search filter, use the user attribute that 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 = 254 characters

**Default**
(objectless=*)

Searches for all objects in tree.

**cfgLDAPCertValidationEnable (Read or Write)**

**Description**
Controls certificate validation during SSL handshake.

**Legal Values**
- 1 (TRUE) — Uses the CA certificate to validate the LDAP server certificate during SSL handshake.
- 0 (FALSE) — Skips the certificate validation step of SSL handshake.

**Default**
1

**cfgLDAPSRVLookupDomainName (Read Only)**

**Description**
To use in the SRV lookup, configure the domain name.

**Legal Values**
String of maximum length of 254 alphanumeric characters and hyphens. The string must begin with a letter.

**Default**
[nul]

**cfgLDAPSRVLookupServiceName (Read or Write)**

**Description**
To use in the SRV lookup, configure the service name.

**Legal Values**
String of maximum length of 254 characters.
**cfgLdapRoleGroup**

This group allows the user to configure role groups for LDAP.

Use this object with the `config` or `getconfig` subcommands.

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` — an iDRAC privilege map

Each LDAP-authenticated user assumes the total set of iDRAC 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 that DNs.

The following sections provide information about the objects in the `cfgLdapRoleGroup`.

**cfgLdapRoleGroupIndex (Read Only)**

**Description**
It is the index value of the Role Group Object.

**Legal Values**
An integer between 1 and 5

**Default**
<instance>

**cfgLdapRoleGroupDN (Read or Write)**

**Description**
It is the Domain Name of the group in this index.

**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 or 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
```

cfgStandardSchema

This group contains parameters to configure the Active Directory standard schema settings.

Use this object with the `config` or `getconfig` subcommands.

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

cfgSSADRoleGroupIndex (Read Only)

<table>
<thead>
<tr>
<th>Description</th>
<th>Index of the Role Group as recorded in the Active Directory.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>An integer from 1 to 5</td>
</tr>
<tr>
<td>Default</td>
<td><code>&lt;instance&gt;</code></td>
</tr>
</tbody>
</table>

cfgSSADRoleGroupName (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Name of the Role Group as recorded in the Active Directory forest.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>Any printable text string of up to 254 characters, with no white space.</td>
</tr>
<tr>
<td>Default</td>
<td><code>&lt;blank&gt;</code></td>
</tr>
</tbody>
</table>

cfgSSADRoleGroupDomain (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Active Directory Domain in which the Role Group resides.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>Any printable text string of up to 254 characters, with no white space.</td>
</tr>
<tr>
<td>Default</td>
<td><code>&lt;blank&gt;</code></td>
</tr>
</tbody>
</table>

cfgSSADRoleGroupPrivilege (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Use the bit mask numbers listed in the table below to set role-based authority privileges for a Role Group.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>0x00000000 to 0x000001ff</td>
</tr>
<tr>
<td>Default</td>
<td><code>&lt;blank&gt;</code></td>
</tr>
</tbody>
</table>
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>

**cfgThermal**

This group displays and configures the thermal settings. Use this object with the `config` or `getconfig` subcommands.

To set the configurations, you must have the Chassis Configuration Administrator privileges.

**cfgThermalEnhancedCoolingMode (Read or Write)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Configures the enhanced cooling mode.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td></td>
</tr>
<tr>
<td>1 — Enabled</td>
<td></td>
</tr>
<tr>
<td>0 — Disabled</td>
<td></td>
</tr>
<tr>
<td>Default</td>
<td>0 — Disabled</td>
</tr>
</tbody>
</table>

**cfgIpmiSol**

This group is used to configure the Serial Over LAN (SOL) capabilities of the system.

The following sections provide information about the objects in the `cfgIpmiSol` group.
### cfgIpmiSolEnable (Read or Write)

**Description**
Enables or disables SOL.

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

**Default**
1

### cfgIpmiSolBaudRate (Read or Write)

**Description**
Specifies baud rate for serial communication over LAN.

**Legal Values**
9600, 19200, 57600, 115200

**Default**
115200

### cfgIpmiSolMinPrivilege (Read or Write)

**Description**
Specifies the minimum privilege level required for SOL access.

**Legal Values**
- 2 (User)
- 3 (Operator)
- 4 (Administrator)

**Default**
4

### cfgIpmiSolAccumulateInterval (Read or Write)

**Description**
Specifies the typical amount of time that iDRAC waits before transmitting a partial SOL character data packet. This value is 1-based 5ms increments.

**Legal Values**
1–255

**Default**
10
cfgIpmiSolSendThreshold (Read or Write)

Description
To buffer before sending an SOL data packet, specify the SOL threshold limit value and the maximum number of bytes.

Legal Values 1–255

Default 255

cfgIpmiLan

This group is used to configure the IPMI over LAN capabilities of the system.

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

cfgIpmiLanEnable (Read or Write)

Description Enables or disables the IPMI over LAN interface.

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

Default 0

cfgIpmiLanPrivLimit (Read or Write)

Description Specifies the maximum privilege level allowed for IPMI over LAN access.

Legal Values
- 2 (User)
- 3 (Operator)
- 4 (Administrator)

Default 4

cfgIpmiLanAlertEnable (Read or Write)

Description Enables or disables global email alerting. This property overrides all individual email alerting enable or disable properties.

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

Default 0
cfgIpmiLanEncryptionKey (Read or Write)

Description: Specifies the IPMI encryption key.
Legal Values: A string of hexadecimal digits from 0 to 40 characters with no spaces. Only an even number of digits is allowed.
Default: 00000000000000000000000000000000

cfgIpmiLanPetCommunityName (Read or Write)

Description: Specifies the SNMP community name for traps.
Legal Values: A string of up to 18 characters.
Default: public

cfgIpmiPetIpv6

This group is used to configure IPv6 platform event traps on the managed server.
The following sections provide information about the objects in the cfgIpmiPetIpv6 group.

cfgIpmiPetIPv6Index (Read Only)

Description: Unique identifier for the index corresponding to the trap.
Legal Values: 1–4
Default: <index Values>

cfgIpmiPetIPv6AlertDestIpAddr

Description: Configures the IPv6 alert destination IP address for the trap.
Legal Values: IPv6 address
Default: <blank>
cfgIpmiPetIPv6AlertEnable (Read or Write)

**Description**
Enables or disables the IPv6 alert destination for the trap.

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

**Default**
0

cfgIpmiPef

This group is used to configure the platform event filters available on the managed server.

The event filters can be used to control policy related to actions that are triggered when critical events occur on the managed server.

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

cfgIpmiPefName (Read Only)

**Description**
Specifies the name of the platform event filter.

**Legal Values**
A string of up to 255 characters.

**Default**
The name of the index filter.

cfgIpmiPefIndex (Read or Write)

**Description**
Specifies the index of a specific platform event filter.

**Legal Values**
- For iDRAC on Rack and Tower Servers: 1–22
- For iDRAC Enterprise on Blade Servers: 1–9

**Default**
The index value of a platform event filter object.

cfgIpmiPefAction (Read or Write)

**Description**
Specifies the action that is performed on the managed server when the alert is triggered.

**NOTE:** For iDRAC on Rack and Tower servers, this object is read-only for indexes 20, 21, and 22.

**Legal Values**
- 0 (None)
- 1 (Power Down)
- 2 (Reset)
• 3 (Power Cycle)

Default 0

cfgIpmiPefEnable (Read or Write)

Description Enables or disables a specific platform event filter.

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

Default 1

cfgIpmiPet

This group is used to configure platform event traps on the managed server.

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

cfgIpmiPetIndex (Read Only)

Description Unique identifier for the index corresponding to the trap.

Legal Values 1–4

Default The index value of a specific platform event trap.

cfgIpmiPetAlertDestIpAddr (Read/Write)

Description Specifies the destination IPv4 address for the trap receiver on the network. The trap receiver receives an SNMP trap when an event is triggered on the managed server.

Legal Values A string representing a valid IPv4 address. For example, 192.168.0.67.

Default 0.0.0.0

cfgIpmiPetAlertEnable (Read or Write)

Description Enables or disables a specific trap.

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

This group is used to configure the Active Directory user domain names. A maximum of 40 domain names can be configured at any given time.

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

cfgUserDomainIndex (Read Only)
Description Represents a specific domain.
Legal Values 1–40
Default The index value.

cfguserdomainname (Read Only)
Description Specifies the Active Directory user domain name.
Legal Values A string of up to 254 ASCII characters
Default <blank>

cfgServerPower

This group provides several power management features.

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

cfgServerPowerStatus (Read Only)
Description Represents the server power state, either ON or OFF.
Legal Values
• 1 (ON)
• 0 (OFF)
Default 0

cfgServerPowerAllocation (Read Only)
Description Represents the available allocated power supply for server usage.
NOTE: If there is more than one power supply, this object represents the minimum capacity power supply.

NOTE: This object is applicable only for iDRAC Enterprise on Rack and Tower Servers and not for iDRAC on Blade Servers.

Legal Values
A string of up to 32 characters

Default
<blank>

**cfgServerActualPowerConsumption (Read Only)**

Description
Represents the power consumption by the server at the current time.

Legal Values
Not applicable

Default
<blank>

**cfgServerPowerCapEnable (Read or Write)**

Description
Enables or disables the user specified power budget threshold.

This object is Read only for iDRAC Enterprise on Blade Servers.

Legal Values
- 0 — Disables the user specified power budget threshold
- 1 — Enables the user specified power budget threshold

Default
1

**cfgServerMinPowerCapacity (Read Only)**

Description
Represents the minimum server power capacity on a blade based on the current component inventory.

Legal Values
Not applicable

Default
<blank>

**cfgServerMaxPowerCapacity (Read Only)**

Description
Represents the maximum server power capacity based on the current component consumption.

Legal Values
Not applicable

Default
<blank>
cfgServerPeakPowerConsumption (Read Only)

Description: Represents the servers maximum power consumption until the current time.

Legal Values: Not applicable

Default: Peak power consumption of the server

cfgServerPeakPowerConsumptionTimestamp (Read Only)

Description: Specifies time when the maximum power consumption was recorded.

Legal Values: A string of up to 32 characters.

Default: Timestamp of the peak power consumption of the server

cfgServerPowerConsumptionClear (Write Only)

Description: Clears the current recorded power statistics.

Legal Values: 1 — Clears the Power Consumption Statistics

Default: None

cfgServerPowerCapWatts (Read or Write)

Description: Represents the server power threshold in Watts.

NOTE: This value is applicable only if the cfgServerPowerCapEnable is set to 1.

Legal Values: None

Default: Server power threshold in Watts.

cfgServerPowerCapBtuhr (Read or Write)

Description: Represents the server power threshold in BTU/hr.

NOTE: This value is applicable only if cfgServerPowerCapEnable is set to 1.

Legal Values: None

Default: Server power threshold in BTU/hr.
cfgServerPowerCapPercent (Read or Write)

**Description**
Represents the server power threshold in percentage.

**NOTE:** This value is applicable only if `cfgServerPowerCapEnable` is set to 1.

**Legal Values**
None

**Default**
Server power threshold in percentage.

cfgServerPowerLastHourAvg (Read Only)

**Description**
Displays the average power value during the last hour.

**Legal Values**
None

**Default**
Average power value during the last hour.

cfgServerPowerLastDayAvg (Read Only)

**Description**
Displays the average power value during the last day.

**Legal Values**
None

**Default**
Average power value during the last day.

cfgServerPowerLastWeekAvg (Read Only)

**Description**
Displays the average power value during the last week.

**Legal Values**
None

**Default**
Average power value during the last week.

cfgServerPowerLastHourMinPower (Read Only)

**Description**
Displays the minimum power value during the last hour.

**Legal Values**
Not applicable

**Default**
Minimum power value during the last hour.
cfgServerPowerLastHourMinTime (Read Only)

**Description**
Displays the timestamp of minimum power value during the last minute.

**Legal Values**
Time in the format: DD MM Date HH:MM:SS YYYY

```text
cfgServerPowerLastHourMinTime=Mon Sep 26 19:10:56 2011
```

where,
- DD = Day of the week
- MM = Month
- Date = Date
- YYYY = Year
- HH = hour
- MM = Minutes
- SS = Seconds

**Default**
Minimum power value during the last minute.

cfgServerPowerLastHourMaxPower (Read Only)

**Description**
Displays the maximum power value during the last hour.

**Legal Values**
Not applicable

**Default**
Maximum power value during the last hour.

cfgServerPowerLastHourMaxTime (Read Only)

**Description**
Displays the timestamp of maximum power value during the last hour.

**Legal Values**
Time in the format: DD MM Date HH:MM:SS YYYY

```text
 cfgServerPowerLastHourMaxTime=Mon Sep 26 19:10:56 2011
```

where,
- DD = Day of the week
- MM = Month
- Date = Date
- YYYY = Year
- HH = hour
- MM = Minutes
- SS = Seconds

**Default**
Maximum power value during the last hour.
cfgServerPowerLastDayMinPower (Read Only)

Description
Displays the minimum power value during the last day.

Legal Values
Not applicable

Default
Minimum power value during the last day.

cfgServerPowerLastDayMinTime (Read Only)

Description
Displays the timestamp of minimum power value during the last day.

Legal Values
Time in the format: DD MM Date HH:MM:SS YYYY
where,
- DD = Day of the week
- MM = Month
- Date = Date
- YYYY = Year
- HH = hour
- MM = Minutes
- SS = Seconds

Default
Timestamp of the minimum power value during the last day.

cfgServerPowerLastDayMaxPower (Read Only)

Description
Displays the maximum power value during the last day.

Legal Values
Not applicable

Default
Maximum power value during the last day.

cfgServerPowerLastDayMaxTime (Read Only)

Description
Displays the timestamp of maximum power value during the last day.

Legal Values
Time in the format: DD MM Date HH:MM:SS YYYY
where,
- DD = Day of the week
- MM = Month
- Date = Date
- YYYY = Year
• HH = hour
• MM = Minutes
• SS = Seconds

Default
Timestamp of the maximum power value during the last day.

cfgServerPowerLastWeekMinPower (Read Only)

Description
Displays the minimum power value during the last week.

Legal Values
Not applicable

Default
Minimum power value during the last week.

cfgServerPowerLastWeekMinTime (Read Only)

Description
Displays the timestamp of minimum power value during the last week.

Legal Values
A string of up to 32 characters.

Time in the format: DD MM Date HH:MM:SS YYYY

where,
• DD = Day of the week
• MM = Month
• Date = Date
• YYYY = Year
• HH = hour
• MM = Minutes
• SS = Seconds

Default
Timestamp of the minimum power value during the last week.

cfgServerPowerLastWeekMaxPower (Read Only)

Description
Displays the maximum power value during the last week.

Legal Values
None

Default
Maximum power value during the last week.
**cfgServerPowerLastWeekMaxTime (Read Only)**

**Description**
Displays the timestamp of maximum power value during the last week.

**Legal Values**
A string of up to 32 characters.

Time in the format: DD MM Date HH:MM:SS YYYY

where,
- DD = Day of the week
- MM = Month
- Date = Date
- YYYY = Year
- HH = hour
- MM = Minutes
- SS = Seconds

**Default**
Timestamp of the maximum power value during the last week.

**cfgServerPowerInstHeadroom (Read Only)**

**Description**
Displays the difference between the available power and the current power consumption.

This object is applicable only for iDRAC on Rack and Tower Servers and not for iDRAC Enterprise on Blade Servers.

**Legal Values**
Not applicable

**Default**
Difference between the available power and the current power consumption.

**cfgServerPowerPeakHeadroom (Read Only)**

**Description**
Displays the difference between the available power and the peak power consumption.

This object is applicable only for iDRAC on Rack and Tower Servers and not for iDRAC Enterprise on Blade Servers.

**Legal Values**
None

**Default**
Difference between the available power and the peak power consumption.

**cfgServerActualAmperageConsumption (Read Only)**

**Description**
Displays the current power consumption.

**Legal Values**
Not applicable
Default Current power consumption.

cfgServerPeakAmperage (Read Only)
Description Displays the current peak power consumption.
Legal Values Not applicable
Default Current peak power consumption.

cfgServerPeakAmperageTimeStamp (Read Only)
Description Displays the timestamp of the current peak power consumption.
Legal Values A string of up to 32 characters.
Time in the format: DD MM Date HH:MM:SS YYYY
where,
• DD = Day of the week
• MM = Month
• Date = Date
• YYYY = Year
• HH = hour
• MM = Minutes
• SS = Seconds
Default Timestamp of the current peak power consumption.

cfgServerCumulativePowerConsumption (Read Only)
Description Displays the cumulative power consumption.
Legal Values Not applicable
Default Cumulative power consumption.

cfgServerCumulativePowerConsumptionTimeStamp (Read Only)
Description Displays the timestamp of the cumulative power consumption.
Legal Values A string of up to 32 characters.
cfgServerCumulativePowerClear (Write Only)

Description: Clears the cfgServerCumulativePowerConsumption and cfgServerCumulativePowerConsumptionTimeStamp values.

Legal Values: 1

Default: None

cfgServerPowerPCleAllocation (Read or Write)

Description: Amount of power allocated to the PCIe cards.

This object is applicable for iDRAC Enterprise only for specific Blade Servers and not for iDRAC on Rack and Tower Servers.

You must have the Administrator privileges to modify the value for this object.

Legal Values: 0 W: For platforms that do not support PCIe cards.
100 W — 500 W: For platforms that support PCIe cards.

Default: 0: For platforms that do not support PCIe cards.
500 W: For platforms that support PCIe cards.

cfgServerPowerSupply

This group contains information related to the power supplies.

The cfgServerPowerSupply object group is applicable only for iDRAC on Rack and Tower Servers and not for iDRAC Enterprise on Blade Servers.

NOTE: The getconfig subcommand always shows eight cfgServerPowerSupply indexes, even if two power supplies are installed in the system or the system supports a maximum of two PSUs. For the uninstalled and unsupported units, all the objects in the cfgServerPowerSupply group displays a value of 0.
The following sections provide information about the objects in the `cfgServerPowerSupply` group.

### `cfgServerPowerSupplyIndex`

- **Description**: Specifies index of the PSU.
- **Legal Values**: Integer 1–8
- **Default**: None

**NOTE**: Indexes 1–8 are supported to support up to 8 PSUs. If any PSU is not present then `cfgServerPowerSupplyOnlineStatus` does not exist and for all the other properties, it is 0.

### `cfgServerPowerSupplyMaxInputPower (Read Only)`

- **Description**: Displays the AC input rated power in Watts.
- **Legal Values**: A string of up to 32 characters.
- **Default**: 0

### `cfgServerPowerSupplyMaxOutputPower (Read Only)`

- **Description**: Displays the AC output rated power in Watts.
- **Legal Values**: A string of up to 32 characters.
- **Default**: 0

### `cfgServerPowerSupplyOnlineStatus (Read Only)`

- **Description**: Displays the status of the PSU.
- **Legal Values**:
  - 0 — Present
  - 1 — Absent
  - 2 — Failure
  - 3 — Predictive failure
- **Default**: 0 — Present
cfgServerPowerSupplyFwVer (Read Only)

Description
Displays the firmware version of the PSU, in the format x.xx.xxx.

Legal Values
A string up to 8 characters.

Default
Null

cfgServerPowerSupplyCurrentDraw (Read Only)

Description
Displays the instantaneous current consumption in 0.1 amps.

Legal Values
A string of up to 32 characters.

Default
0

cfgServerPowerSupplyType

Description
Displays whether the power supply is AC or DC.

Legal Values
A string of up to 32 characters.

Default
0

cfgIPv6LanNetworking

This group is used to configure the IPv6 over LAN networking capabilities.

Use this object with the config or getconfig subcommands.

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

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

cfgIPv6Enable (Read or Write)

Description
Enables or disables iDRAC IPv6 stack.

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

Default
0
cfgIPv6Address1 (Read or Write)

Description
Specifies iDRAC IPv6 address.

Legal Values
String representing a valid IPv6 entry.

Default


cfgIPv6Gateway (Read or Write)

Description
iDRAC gateway IPv6 address.

Legal Values
Specifies string representing a valid IPv6 entry.

Default
"::"


cfgIPv6AutoConfig (Read or Write)

Description
Enables or disables the IPv6 Auto Configuration option.

1. NOTE: If this value is set to 0, the iDRAC disables auto configuration and statically assigns IPv6 addresses. If this value is set to 1, the iDRAC obtains address and route information using stateless auto configuration and DHCPv6.

2. NOTE: The iDRAC uses its MAC address for its DUID (DUID-LL) when communicating with a DHCPv6 server.

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

Default
0


cfgIPv6PrefixLength (Read or Write)

Description
Specifies the prefix length for IPv6 address.

1. NOTE:
   - This property can be configured even when cfgIPv6AutoConfig is enabled.

Legal Values
1–128

Default
64
cfgIPv6LinkLocalAddress (Read Only)

Description  The iDRAC IPv6 link local address.
Legal Values  Specifies a string representing a valid IPv6 entry.
Default  

cfgIPv6Address2 (Read Only)

Description  The iDRAC IPv6-second address.
Legal Values  A string representing a valid IPv6 entry.
Default  

cfgIPv6Address3 (Read Only)

Description  The iDRAC IPv6 third address.
Legal Values  String representing a valid IPv6 entry.
Default  

cfgIPv6Address4 (Read Only)

Description  The iDRAC IPv6 fourth address.
Legal Values  String representing a valid IPv6 entry.
Default  

cfgIPv6Address5 (Read Only)

Description  The iDRAC IPv6 fifth address.
Legal Values  String representing a valid IPv6 entry.
Default  
cfgIPv6Address6 (Read Only)

Description: The iDRAC IPv6 sixth address.

Legal Values: String representing a valid IPv6 entry.

Default: 

cfgIPv6Address7 (Read Only)

Description: The iDRAC IPv6 seventh address.

Legal Values: String representing a valid IPv6 entry.

Default: 

cfgIPv6Address8 (Read Only)

Description: The iDRAC IPv6 eighth address.

Legal Values: String representing a valid IPv6 entry.

Default: 

cfgIPv6Address9 (Read Only)

Description: The iDRAC IPv6 ninth address.

Legal Values: String representing a valid IPv6 entry.

Default: 

cfgIPv6Address10 (Read Only)

Description: The iDRAC IPv6 tenth address.

Legal Values: String representing a valid IPv6 entry.

Default: 

cfgIPv6Address11 (Read Only)

Description  The iDRAC IPv6 eleventh address.
Legal Values  String representing a valid IPv6 entry.
Default  :

cfgIPv6Address12 (Read Only)

Description  The iDRAC IPv6 twelfth address.
Legal Values  String representing a valid IPv6 entry.
Default  :

cfgIPv6Address13 (Read Only)

Description  The iDRAC IPv6 thirteenth address.
Legal Values  String representing a valid IPv6 entry.
Default  :

cfgIPv6Address14 (Read Only)

Description  The iDRAC IPv6 fourteenth address.
Legal Values  String representing a valid IPv6 entry.
Default  :

cfgIPv6Address15 (Read Only)

Description  The iDRAC IPv6 fifteenth address.
Legal Values  String representing a valid IPv6 entry.
Default  :
cfgIPv6DNS Servers From DHCP6 (Read or Write)

Description Specifies whether cfgIPv6DNSServer1 and cfgIPv6DNSServer2 are static or DHCP IPv6 addresses.

**NOTE:** This property is used only if cfgIPv6AutoConfig is set to 1 (true).

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

Default 0

cfgIPv6DNSServer1 (Read or Write)

Description Specifies the IPv6 DNS server address.

**NOTE:** This property is used only if cfgIPv6DNS Servers From DHCP6 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 “::”

cfgIPv6 Static Lan Networking

This group is used to configure the IPv6 Static over LAN networking capabilities.

cfgIPv6StaticEnable (Read or Write)

Description Enables or disables the static IPv6 stack.

Legal Values
- 0 — Disabled
- 1 — Enabled

Default 0 — Disabled

**NOTE:** If this object is modified, then the object cfgIPv6Enable is also modified.

cfgIPv6StaticAddress1 (Read or Write)

Description Returns or sets the static IPv6 address1.
NOTE: Only set the current IPv4 address if \texttt{cfgNicUseDhcp} is set to 0 (false).

| Legal Values | Any IPv4 address |
| Default      |                |

\textbf{cfgIPv6StaticGateway (Read or Write)}

\textbf{Description} \hspace{1em} Returns or sets gateway static IPv6 address.

| Legal Values | Any IPv6 address |
| Default      |                |

\textbf{cfgIPv6StaticPrefixLength (Read or Write)}

\textbf{Description} \hspace{1em} The prefix length for static IPv6 address 1.

| Legal Values | 0–128 |
| Default      | 64    |

\textbf{cfgIPv6StaticAutoConfig (Read/Write)}

\textbf{Description} \hspace{1em} Enables or disables the static IPv6 AutoConfig option.

| Legal Values | 0 — Disabled \hspace{1em} 1 — Enabled |
| Default      | 1 — Enabled                           |

\textbf{NOTE:} If this object is modified, then the object \texttt{cfgIPv6Autoconfig} is also modified.

\textbf{cfgIPv6StaticDNSServersFromDHCP6 (Read or Write)}

\textbf{Description} \hspace{1em} Specifies the DNS server static IP addresses.

| Legal Values | 0 — DNS Server must be configured as static. \hspace{1em} 1 — The device will get the DNS servers from DHCPv6. |
| Default      | 0 — Disabled                                  |
cfgIPv6StaticDNSServer1 (Read or Write)

Description
Specifies the DNS server 1 static IPv6 address.

Legal Values
Any IPv6 Address

Default

cfgIPv6StaticDNSServer2 (Read or Write)

Description
Specifies the DNS server 2 static IPv6 address.

Legal Values
Any IPv6 address

Default

cfgIPv6DNSServer2 (Read or 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
cfgIPv6Enable=1
cfgIPv6AutoConfig=1
cfgIPv6Address=::
cfgIPv6PrefixLength=64
cfgIPv6Gateway=::
cfgIPv6DNSServersFromDHCP6=1
cfgIPv6DNSServer1=::
cfgIPv6DNSServer2=::

If both IPv4 and IPv6 are enabled on the iDRAC, IPv6 DNS servers take priority. The order of preference for DNS servers is:

• cfgIPv6DNSServer1
• cfgIPv6DNSServer2
• cfgDNSServer1
• cfgDNSServer2
cfgIPv6URL

This group specifies properties used to configure iDRAC IPv6 URL.

The following sections provide information about the objects in the cfgIPv6URL group.

cfgIPv6URLstring (Read Only)

Description: The iDRAC IPv6 URL.

Legal Values: A string of up to 80 characters.

Default: <blank>

cfgIpmiSerial

This group specifies properties used to configure the IPMI serial interface of the BMC.

It is applicable only for iDRAC on Rack and Tower Servers and not for iDRAC Enterprise on Blade Servers.

cfgIpmiSerialBaudRate (Read or Write)

Description: Specifies the baud rate for a serial connection over IPMI.

Legal Values: 9600, 19200, 57600, 115200

Default: 57600

cfgIpmiSerialChanPrivLimit (Read or Write)

Description: Specifies the maximum privilege level allowed on the IPMI serial channel.

Legal Values:
- 2 (User)
- 3 (Operator)
- 4 (Administrator)

Default: 4

cfgIpmiSerialConnectionMode (Read or Write)

Description: When the iDRAC cfgSerialConsoleEnable property is set to 0(disabled), the iDRAC serial port becomes the IPMI serial port. This property determines the IPMI defined mode of the serial port.
In Basic mode, the port uses binary data with the intent of communicating with an application program on the serial client. In Terminal mode, the port assumes that a dumb ASCII terminal is connected and allows simple commands to be entered.

**Legal Values**
- 0 (Terminal)
- 1 (Basic)

**Default**
1

cfgIpmiSerialDeleteControl (Read or Write)

**Description**
Enables or disables delete control on the IPMI serial interface.

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

**Default**
0

cfgIpmiSerialEchoControl (Read or Write)

**Description**
Enables or disables echo control on the IPMI serial interface.

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

**Default**
1

cfgIpmiSerialFlowControl (Read or Write)

**Description**
Specifies the flow control setting for the IPMI serial port.

**Legal Values**
- 0 (None)
- 1 (CTS or RTS)

**Default**
1

cfgIpmiSerialHandshakeControl (Read or Write)

**Description**
Enables or disables the IPMI terminal mode handshake control.

**Legal Values**
- 0 (FALSE)
- 1 (TRUE)
 cfgIpmiSerialNewLineSequence (Read or Write)

Description: Specifies the new line sequence specification for the IPMI serial interface.

Legal Values:
- 0 — None
- 1 — CR-LF
- 2 — NULL
- 3 — CR
- 4 — LF-CR
- 5 — LF

Default: 1

 cfgIpmiSerialLineEdit (Read or Write)

Description: Enables or disables line editing on the IPMI serial interface.

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

Default: 1

 cfgIpmiSerialInputNewLineSequence (Read or Write)

Description: Specifies the input new line sequence specification for the IPMI serial interface.

Legal Values:
- 1 — ENTER
- 2 — NULL

Default: 1

 cfgSmartCard

This group specifies properties used to support access to iDRAC using a smart card.

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

 cfgSmartCardLogonEnable (Read or Write)

Description: To iDRAC using a smart card, enable or disable with Remote RACADM support for access.
NOTE: Enabling with remote RACADM is only applicable for iDRAC on Rack and Tower Servers.

Legal Values
- 0 (Disabled)
- 1 (Enabled)
- 2 (Enabled with Remote RACADM) — It is not applicable for iDRAC Enterprise on Blade Servers.

Default
0

cfgSmartCardCRLEnable (Read or Write)

Description
Enables or disables the Certificate Revocation List (CRL).

This object is applicable only for iDRAC on Rack and Tower Servers and not for iDRAC Enterprise on Blade Servers.

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

Default
0

cfgNetTuning

This group enables users to configure the advanced network interface parameters for the RAC NIC. When configured, the updated settings may take up to a minute to become active.

NOTE: This group is applicable only for iDRAC on Rack and Tower Servers and not for iDRAC Enterprise on Blade Servers.

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.

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

cfgNetTuningNicAutoneg (Read or Write)

Description
Enables auto negotiation of physical link speed and duplex. If enabled, auto negotiation 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
cfgNetTuningNic100MB (Read or Write)

**Description**
Specifies the speed for iDRAC NIC.

**NOTE:** To set this property:
- iDRAC NIC selection must be set to Dedicated mode.
- iDRAC NIC Auto negotiation must be disabled.
- iDRAC IPv4 must be enabled.
- iDRAC IPv4 DHCP must be enabled.
- iDRAC IPv6 must be enabled.
- iDRAC IPv6 auto configuration must be enabled.

**Legal Values**
- 0 (10 MBit)
- 1 (100 MBit)
- 2 (1000 MBit)

**NOTE:** You cannot manually set the Network Speed to 1000 MBit. This option is available only if `cfgNetTuningNicAutoNeg` is set to 1 (Enabled).

**Default**
1

cfgNetTuningNicFullDuplex (Read or Write)

**Description**
Specifies the duplex setting for the 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 or Write)

**Description**
Indicated the maximum size of units in bytes transmitted by NIC.

**Legal Values**
576–1500

**Default**
1500

cfgSensorRedundancy

This group is used to set the power supply redundancy.

The following sections provide information about the objects in the `cfgSensorRedundancy` group.
This group is applicable only for iDRAC on Rack and Tower Servers and not for iDRAC Enterprise on Blade Servers.

**cfgSensorRedundancyIndex (Read Only)**

**Description**
Specifies index for the sensor redundancy group being read. Only power supply redundancy is supported.

**Legal Values**
1

**Default**
None

**cfgSensorRedundancyPolicy (Read or Write)**

**Description**
Sets the power supply redundancy policy.

**Legal Values**
- 2 — N/A, for systems that are not supported
- 3 — Non Redundant
- 4—1+1 Redundant
- 4—2+1 Redundant
- 16—2+2 Redundant

**Default**
Any legal value at that particular execution instance.

**cfgSensorRedundancyCapabilities (Read Only)**

**Description**
Returns the redundancy capabilities in the form of a bitmask. This bitmask allows the user to know which values can be set for `cfgSensorRedundancyPolicy`.

**Legal Values**
A bit mask. More than 1 bit can be set at a time to indicate multiple redundancy support.

- 0— N/A, for systems that are not supported
- 1— Non-Redundant
- 2— 1+1 — Redundant
- 4— 2+1 — Redundant
- 8— 2+2 — Redundant

**Default**
0

**cfgSensorRedundancyStatus (Read Only)**

**Description**
Indicates the redundancy status. The status is N/A on platforms that do not support the power supply sensor redundancy.

**Legal Values**
String:
- N/A
- Full
This group is used to configure the properties for the Virtual Flash SD card.

**NOTE:** If the vFlash card is present but is not enabled, the query for any property under this group displays:

```
ERROR: vFlash is not enabled.
```

To view the properties of this group, enable the vFlash using the command:

```
racadm config -g cfgvFlashSD -o cfgvFlashSDEnable 1
```

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

### cfgVFlashSDInitialized (Read Only)

**Description**
Displays whether an SD card is initialized.

**Legal Values**
- 0
- 1

**Default**
None

### cfgVFlashSDEnable (Read or Write)

**Description**
Enables or disables the vFlash SD card.

**NOTE:** Disabling vFlashPartition by setting `cfgVFlashSDEnable` to 0 does not require a license.

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

**Default**
1

### cfgVFlashSDSize (Read Only)

**Description**
Displays the size of the vFlash SD card in megabytes (MB).

**Legal Values**
A string of up to 64 characters.

**Default**
`<card size>`
cfgVFlashSDLicensed (Read Only)

Description Displays whether an SD card or vFlash SD card is inserted. The vFlash SD card supports the new enhanced vFlash features and the SD card supports only the limited vFlash features.

Legal Values

- 0 (SD card is inserted)
- 1 (vFlash SD card is inserted)

Default None

cfgVFlashSDAvailableSize (Read Only)

Description Displays the available memory (in MB) on the vFlash SD card that can be used to create new partitions.

Legal Values A string of up to 64 characters.

Default If the card is not initialized, default is 0. If initialized, displays the unused memory on the card.

cfgVFlashSDHealth (Read Only)

Description Displays the current health status of the vFlash SD card.

Legal Values String:

- OK
- Warning
- Critical
- Unknown

Default OK

cfgVFlashSDWriteProtect (Read Only)

Description Displays whether the physical WriteProtect latch on the vFlash SD card is enabled or disabled.

Legal Values

- 0 (vFlash is not write-protected)
- 1 (vFlash is write-protected)

Default None

cfgVFlashPartition

This group is used to configure properties for individual partitions on the vFlash SD Card. Up to 16 partitions are supported, indexed from 1 to 16.
NOTE: For SD cards, the index value is limited to 1 because only a single partition of size 256MB is allowed.

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

**cfgVFlashPartitionIndex (Read Only)**

**Description**
The index value of the partition.

**Legal Values**
Integer 1–16

**Default**
None

**cfgVFlashPartitionSize (Read Only)**

**Description**
Displays the size of the partition.

**Legal Values**
1 MB to 4 GB

**Default**
None

**cfgVFlashPartitionEmulationType (Read or Write)**

**Description**
View or modify the emulation type for the partition.

**Legal Values**
String:
- HDD
- Floppy
- CD-DVD

**Default**
None

**cfgVFlashPartitionFlashOSVolLabel (Read Only)**

**Description**
Displays the label for the partition that is visible to the operating system.

**Legal Values**
An alphanumeric string of up to six characters.

**Default**
None
cfgVFlashPartitionFormatType (Read Only)

**Description**
Displays the format type of the partition.

**Legal Values**
String:
- FAT16
- FAT32
- EXT2
- EXT3
- CD
- RAW

**Default**
None

cfgVFlashPartitionAccessType (Read or Write)

**Description**
Indicates the partition access permissions. It configures the access type to read-write.

**Legal Values**
- 0 (Read Only)
- 1 (Read-Write)

**Default**
0

cfgVFlashPartitionAttachState (Read or Write)

**Description**
View or modify the partition to attached or detached.

**NOTE:** Detaching the vFlashPartition by setting the `cfgVFlashPartitionAttachState` to 0 does not require a license.

**Legal Values**
- 1 — Attached
- 0 — Detached

**Default**
0 — Detached

cfgLogging

This group contains parameters to enable or disable the OEM event log filtering.

The following section provide information about the objects in the `cfgLogging` group:
cfgLoggingSELOEMEventFilterEnable (Read or Write)

Description: Enables or disables the SEL Log filtering.

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

Default: 0

cfgRacSecurity

For more information about generating certificate signing requests, see the subcommand `sslcsrgen`.

For the country code, go to the link [http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm](http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm)

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

cfgRacSecCsrCommonName (Read or Write)

Description: Specifies the CSR Common Name (CN) that must be an IP or iDRAC name as given in the certificate.

Legal Values: A string of up to 64 characters.

Default: <blank>

cfgRacSecCsrOrganizationName (Read or Write)

Description: Specifies the CSR Organization Name (O).

Legal Values: A string of up to 64 characters.

Default: <blank>

cfgRacSecCsrOrganizationUnit (Read or Write)

Description: Specifies the CSR Organization Unit (OU).

Legal Values: A string of up to 64 characters.

Default: <blank>
cfgRacSecCsrLocalityName (Read or Write)

**Description**
Specifies the CSR Locality (L).

**Legal Values**
A string of up to 128 characters.

**Default**
<blank>

cfgRacSecCsrStateName (Read or Write)

**Description**
Specifies the CSR State Name (S).

**Legal Values**
A string of up to 128 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 or Write)

**Description**
Specifies the CSR email address.

**Legal Values**
A string of up to 64 characters.

**Default**
<blank>

Example

```
racadm config -g cfgRacSecurity

cfgRacSecCsrKeySize=1024
cfgRacSecCommonName=
cfgRacSecOrganizationName=
cfgRacSecOrganizationUnit=
cfgRacSecLocalityName=
cfgRacSecStateName=
cfgRacSecCountryCode=
cfgRacSecEmailAddr=
```
# cfgRacSecCsrKeySize (Read or Write)

<table>
<thead>
<tr>
<th><strong>Description</strong></th>
<th>Specifies the SSL asymmetric key size for the CSRs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legal Values</strong></td>
<td>1024, 2048</td>
</tr>
<tr>
<td><strong>Default</strong></td>
<td>2048</td>
</tr>
</tbody>
</table>
Database Objects With Get and Set Commands

This chapter provides the database groups and objects that must be used with the `get` or `set` subcommands. When using the objects, they must begin with FGDD or FGDD alias.

The set operations for iDRAC, Lifecycle Controller and system objects do not require server restart. However, the set operations for NIC and BIOS objects are staged and job creation and server restart is required to apply and commit the pending values.

**NOTE:**
- While entering an attribute value that is more than one word, ensure that you enclose the attribute value within single quotation marks in the set command.
  
  Example:
  
  ```
  racadm>>set system.thermalsettings.ThermalProfile 'Maximum performance'
  racadm set system.thermalsettings.ThermalProfile 'Maximum performance'
  [Key=system.Embedded.1#ThermalSettings.1]
  Object value modified successfully
  ```
- The staged configuration has the associated pending value in the output of the get operation, after it is configured successfully.
- The object values in the BIOS and NIC groups are case-sensitive.
- For NIC objects, the definition of the key format is: Key = <Device Class>.<Locator>.<Device Number>--<Port Number>[--<Partition Number>]<GroupName" where:
  - Device Class: NIC
  - Locator: Integrated, Slot, Mezzanine or Embedded

  Example:
  
  ```
  $racadm get NIC.NICConfig
  NIC.NICConfig.1 [Key=NIC.Integrated.1-1#NICConfig]
  NIC.NICConfig.2 [Key=NIC.Integrated.1-2#NICConfig]
  NIC.NICConfig.3 [Key=NIC.Integrated.1-3#NICConfig]
  NIC.NICConfig.4 [Key=NIC.Integrated.1-4#NICConfig]
  ```
- The link between the NIC instance and the corresponding key varies from system to system depending on the system configuration.
- The command `racadm help` provides a list of all the attributes along with the description.
- To view the help details of group level, enter the following command: `racadm help <group name>`

  Example:
  
  ```
  $racadm help NIC.NICConfig
  NICConfig -- (null)
  These are the objects supported by the group
  ---------------------------------------------
  BannerMessageTimeout -- Specify the number of seconds that the OptionROM banner is displayed during POST.
  Usage -- Values from 0 - 14
  Required License -- RACADM
  Dependency -- None
  BootOptionROM -- Controls the enablement of legacy Boot Protocols in the Option ROM.
  Usage -- Enabled; Disabled
  Required License -- RACADM
  Dependency -- None
  BootRetryCnt -- Specify the number of retries to attempt in case of boot failure.
  ```
<table>
<thead>
<tr>
<th>Attribute</th>
<th>Usage</th>
<th>Required License</th>
<th>Dependency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usage</td>
<td>-- NoRetry - 0;1Retry - 1; 2Retries - 2;3Retries - 3;4Retries - 4; 5Retries - 5;6Retries- 6; IndefiniteRetries, Default - NoRetry</td>
<td>-- RACADM</td>
<td>-- None</td>
</tr>
<tr>
<td>BootStrapType</td>
<td>-- Specify the boot strap method used to boot to the operating system.</td>
<td>-- RACADM</td>
<td>-- None</td>
</tr>
<tr>
<td>Usage</td>
<td>-- AutoDetect - 0;BBS - 1; Int10h - 2; Int19h- 3; Default - AutoDetect</td>
<td>-- RACADM</td>
<td>-- None</td>
</tr>
<tr>
<td>HideSetupPrompt</td>
<td>-- Specifies whether to display or hide the legacy Option ROM setup prompt during system Power On Self Test (POST).</td>
<td>-- RACADM</td>
<td>-- None</td>
</tr>
<tr>
<td>LegacyBootProto</td>
<td>-- Select a non-UEFI network boot protocol</td>
<td>-- RACADM</td>
<td>-- None</td>
</tr>
<tr>
<td>LnkSpeed</td>
<td>-- Specifies the port speed used for the selected boot protocol</td>
<td>-- RACADM</td>
<td>-- None</td>
</tr>
<tr>
<td>NumberVFAdvertised</td>
<td>-- The number of PCI Virtual Functions (VFs) to be advertised on this port in non-NPAR mode.</td>
<td>-- RACADM</td>
<td>-- None</td>
</tr>
<tr>
<td>VLanId</td>
<td>-- Specifies the ID (tag) for the VLAN Mode. VLAN ID must be in the range from 0 to 4095</td>
<td>-- RACADM</td>
<td>-- None</td>
</tr>
<tr>
<td>VLanMode</td>
<td>-- Virtual LAN mode enables use of a VLAN tag to be used by [vendor defined boot protocols]</td>
<td>-- RACADM</td>
<td>-- None</td>
</tr>
<tr>
<td>WakeOnLan</td>
<td>-- Enables the server to be powered on using an in-band magic packet</td>
<td>-- RACADM</td>
<td>-- None</td>
</tr>
<tr>
<td>WakeOnLanLnkSpeed</td>
<td>-- Select the port speed used for Wake on LAN mode</td>
<td>-- RACADM</td>
<td>-- None</td>
</tr>
</tbody>
</table>

To view the help details of attribute level, enter the following command: racadm help <attribute name>

Example:

```
/tmp # racadm help NIC.NICConfig.WakeOnLanLnkSpeed
WakeOnLanLnkSpeed -- Select the port speed used for Wake on LAN mode
Usage -- AutoNeg; 10Mbps Half; 10Mbps Full; 100Mbps Half; 100Mbps Full
Required License -- RACADM
Dependency -- None/
```

The get and set commands for BIOS and NIC provide the list of attributes on the basis of the system configuration, BIOS version used, hardware, and so on.
Topics:

- System.Backplane
- System.ChassisControl
- System.ChassisInfo
- System.QuickSync
- System.LCD
- System.Location
- System.Power
- System.Power.Supply
- System.ServerOS
- System.ThermalSettings
- System.ThermalConfig
- LifecycleController.LCAttributes
- iDRAC.ActiveDirectory
- iDRAC.ADGroup
- iDRAC.AutoOSLock
- iDRAC.EmailAlert
- iDRAC.Info
- iDRAC.IOIDOpt
- iDRAC.IPBlocking
- iDRAC.IPMLan
- iDRAC.IPML_SERIAL
- iDRAC.IPv4
- iDRAC.IPv4_Static
- iDRAC.IPv6
- iDRAC.IPv6_Static
- iDRAC.IPv6_URL
- iDRAC.LDAP
- iDRAC.LDAPRoleGroup
- iDRAC.LocalSecurity
- iDRAC.Logging
- iDRAC.NIC
- iDRAC.NIC_Static
- iDRAC.NTPConfigGroup
- iDRAC.OS-BMC
- iDRAC.Racadm
- iDRAC.Redfish
- iDRAC.RedfishEventing
- iDRAC.RemoteHosts
- iDRAC.RFS
- iDRAC.RSM
- iDRAC.Security
- iDRAC.Serial
- iDRAC.SerialRedirection
- iDRAC.serverboot
- iDRAC.ServiceModule
- iDRAC.SmartCard
- iDRAC.SNMP
- iDRAC.SNMP.Alert
- iDRAC.SSH
- iDRAC.SysLog
- iDRAC.Telnet
- iDRAC.Time
- iDRAC.Tuning
- iDRAC.Update
- iDRAC.USB
- iDRAC.UserDomain
- iDRAC.Users
- iDRAC.vflashpartition
- iDRAC.vflashed
- iDRAC.VirtualConsole
- iDRAC.VirtualMedia
- iDRAC.VNCServer
- iDRAC.WebServer
- BIOS.BiosBootSettings
- BIOS.EmbServerMgmt
- BIOS.IntegratedDevices
- BIOS.MemSettings
- BIOS.MiscSettings
- BIOS.NetworkSettings
- BIOS.OneTimeBoot
- BIOS.ProcSettings
- BIOS.ProxyAttributes
- BIOS.PxeDev1Settings
- BIOS.SataSettings
- BIOS.SerialCommSettings
- BIOS.SlotDisablement
- BIOS.SysInformation
- BIOS.SysProfileSettings
- BIOS.SysSecurity
- BIOS.UefiBootSettings
- FC.FCDevice
- FC.FCTarget
- FC.HBACfg
- FC.PortConfig
- NIC.ConfigureFormn
- NIC.DCBSets
- NIC.DeviceLevelCfg
- NIC.FCOECapabilities
- NIC.FCoEConfiguration
- NIC.FCoEParams
- NIC.FrmwImgMenu
System.Backplane

The objects in this group manage the backplane.

**System.Backplane.BackplaneBusMode (Read Only)**

**Description**
Indicates the backplane Serial General Purpose Input or Output (SGPIO) mode.

**Legal Values**
- 0 — Unknown
- 1 — I2C
- 2 — SGPIO

**Default Value**
1 — I2C

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

System.ChassisControl

The objects in this group are applicable only to modular chassis such as Dell PowerEdge M1000e. To control the chassis related events, use this group.

**System.ChassisControl.ChassisManagementMonitoring (Read or Write)**

**Description**
Enables or disables the event forwarding from CMC.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default value**
1 — Enabled
System.ChassisInfo

The objects in this group are applicable only to modular chassis such as Dell PowerEdge M1000e. To obtain the chassis-specific information, use this group.

System.ChassisInfo.Model (Read Only)

| Description | Indicates the LCD string the user modifies. |
| Legal Values | String of up to 62 ASCII characters |
| Default Value | None |
| Write Privilege | Not Applicable |
| License Required | Not Applicable |
| Dependency | None |

System.ChassisInfo.Name (Read Only)

| Description | Provides the name of the chassis. For example: CMC-nobel01. |
| Legal Values | String of up to 62 ASCII characters |
| Default Value | None |
| Write Privilege | Not Applicable |
| License Required | Not Applicable |
| Dependency | None |

System.ChassisInfo.ServiceTag (Read Only)

| Description | Provides the Service Tag of the chassis. |
| Legal Values | String of up to 62 ASCII characters |
| Default Value | None |
| Write Privilege | Not Applicable |
| License Required | Not Applicable |
| Dependency | None |

System.QuickSync

The objects in this group manage the configuration and recovery of QuickSync settings.
System.QuickSync.Access (Read or Write)

Description: Configures the accessibility using Quick Sync on the server.

Legal Values:
- 0 — Disabled
- 1 — Read-only
- 2 — Read-write

Default Value: 2 — Read-write

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: To configure, the System.QuickSync.Presence property must indicate Present.

System.QuickSync.InactivityTimeout (Read or Write)

Description: Configures the inactivity timer (in seconds) for Quick Sync.

Legal Values: 15 – 3600 seconds

Default Value: 30 seconds

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: To configure, the System.QuickSync.Presence property must indicate Present.

System.QuickSync.InactivityTimerEnable (Read or Write)

Description: Enables or disables the inactivity timer for Quick Sync.

Legal Values:
- 1 — Enabled
- 0 — Disabled

Default Value: 1 — Enabled

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: To configure, the System.QuickSync.Presence property must indicate Present.

System.QuickSync.Presence (Read or Write)

Description: Indicates the presence of Quick Sync feature in the server.

Legal Values:
- 0 — Not Supported
- 1 — Absent
- 2 — Present
System.LCD

This group enables you to manage the front panel LCD user string settings.

The following section provides information about the objects in the System.LCD group.

NOTE: The System.LCD get and set command works on iDRAC on Blade Server, even if the LCD is not present on the server.

NOTE: You can change the LCD group attributes for monolithic servers even if the LCD is not present on servers.

System.LCD.Configuration (Read or Write)

Description
Current LCD configuration.

Legal Values
- 0 — User Defined
- 1 — Model Name
- 2 — None
- 4 — iDRAC IPv4Address
- 8 — iDRAC MAC Address
- 16 — OS System Name
- 32 — Service Tag
- 64 — IPv6Address
- 128 — Ambient Temperature
- 256 — System Watts
- 512 — Asset Tag

Default Value
32 — Service Tag

Write Privilege
Configure iDRAC and Configure User

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

System.LCD.vConsoleIndication (Read or Write)

Description
Specifies the virtual console indication.

Legal Values
- Enabled
- Disabled

Default Value
Enabled
System.LCD.CurrentDisplay (Read Only)

Description: The string currently displayed on the LCD.

Legal Values: None

Default Value: Not Applicable

Write Privilege: Not Applicable

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

System.LCD.LCDUserString (Read or Write)

Description: Indicates the LCD string set.

**NOTE:** This property is deprecated from version 2.00.00.00. Use the System.LCD.UserDefinedString to perform the operation.

Legal Values: String of up to 62 ASCII characters

Default Value: 0

Write Privilege: Not Applicable

License Required: Not Applicable

Dependency: Not Applicable

System.LCD.QualifierTemp (Read or Write)

Description: Specifies the ambient temperature qualifier.

Legal Values: C, F

Default Value: C

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None
**System.LCD.QualifierWatt (Read or Write)**

**Description**
Specifies the system Watt qualifier.

**Legal Values**
- Watts
- BTU per hour

**Default Value**
Watts

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**System.LCD.UserDefinedString (Read or Write)**

**Description**
Indicates the LCD string set.

**Legal Values**
String of up to 62 ASCII characters

**Default Value**
0

**Write Privilege**
Not Applicable

**License Required**
Not Applicable

**Dependency**
Cannot be configured unless LCD Configuration is user defined.

**System.Location**

This group enables you to manage the server’s physical location characteristics.

The following section provides information about the objects in the <System>.Location group.

**System.Location.Aisle (Read or Write)**

**Description**
Indicates aisle where server is located.

**Legal Values**
String of up to 128 ASCII characters

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
System.Location.DataCenter (Read or Write)

Description: Indicates name of the data center where the system is located.
Legal Values: String of up to 128 ASCII characters
Default Value: Not Applicable
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

System.Location.DeviceSize (Read Only)

Description: Indicates server chassis size.
Legal Values: Values: 1–255
Default Value: Depends on the server form factor
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

System.Location.Rack.Name (Read or Write)

Description: Indicates rack where the system is located.
Legal Values: String of up to 128 ASCII characters
Default Value: Not Applicable
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

System.Location.Rack.Slot (Read or Write)

Description: Indicates the slot where system is located.
Legal Values: Values: 1–255
System.Location.RoomName (Read or Write)

Description: Room name where the system is located.
Legal Values: String of up to 128 ASCII characters
Default Value: Not Applicable
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

System.Location.Chassis.Name (Read Only)

Description: Indicates the chassis name.
Legal Values: String of up to 128 ASCII characters
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

System.Location.Chassis.Slot (Read or Write)

Description: Indicates chassis slot.
Legal Values: Values: 1–255
Default Value: Not Applicable
Write Privilege: Configure iDRAC
License Required: Not Applicable
Dependency: None
System.Power

This group provides power management features for iDRAC.

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

**NOTE:** For Dell PowerEdge FM120x4 server with more than one iDRAC, the power is received and shared from CMC. Hence, the information about power and temperature for individual iDRACs are not displayed.

### System.Power.Status (Read Only)

**Description**
Represents the device power state, either ON or OFF.

**Legal Values**
- 0 — Server is off
- 1 — Server is on.

**Default Value**
0 — Server is off

**Write Privilege**
Not Applicable

**License Required**
Not Applicable

**Dependency**
Not Applicable

### System.Power.ServerAllocation (Read Only)

**Description**
Indicates the power allocated to running blades. This value is displayed in both watts and BTU/h units.

**Legal Values**
0–7928

**Default Value**
Not Applicable

**Write Privilege**
Not Applicable

**License Required**
Not Applicable

**Dependency**
None

### System.Power.Avg.LastDay (Read Only)

**Description**
Indicates the average power value during the last day.

**Legal Values**
Values: 1–65535

**Default Value**
Average power value during the last day.

**Write Privilege**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise
System.Power.Avg.LastHour (Read Only)

Description
Displays the average power value during the last hour.

Legal Values
Values: 1–65535

Default Value
Average power value during the last hour.

Write Privilege
Not Applicable

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

System.Power.Avg.LastWeek (Read Only)

Description
Indicates the average power value during the last week.

Legal Values
Values: 1–65535

Default Value
Average power value during the last week.

Write Privilege
Not Applicable

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None


Description
Represents the active power in BTU/Hr a device is allowed to consume.

Legal Values
Values: 1–65535

Default Value
Not Applicable

Write Privilege
Not Applicable

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None
System.Power.Cap.ActivePolicy.Name (Read Only)

Description: Displays the Active Power Cap Policy Name

Legal Values: String of up to 128 ASCII characters

Default Value: Not Applicable

Write Privilege: Not Applicable

License Required: IDRAC Express or IDRAC Enterprise

Dependency: None

System.Power.Cap.ActivePolicy.Watts (Read Only)

Description: Displays the Active Power Capacity in Watts

Legal Values: Values: 1–65535

Default Value: Not Applicable

Write Privilege: Not Applicable

License Required: IDRAC Express or IDRAC Enterprise

Dependency: None

System.Power.Cap.Btuhr (Read or Write)

Description: Represents the maximum power in BTU/Hr a device is allowed to consume. To meet this capacity, throttle the device in order.

NOTE: This value is applicable only if System.Power.Cap.Enable is set to 1.

Legal Values: Values 1–65535

Default Value: Server power threshold in BTU/hr.

Write Privilege: Configure iDRAC

License Required: IDRAC Express or IDRAC Enterprise

### System.Power.Cap. Enable (Read or Write)

**Description**
Enables or disables user specified power budget threshold configuration.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
1 — Enabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### System.Power.Cap.MaxThreshold (Read Only)

**Description**
Because it is based on the current component inventory, it has maximum server power capacity.

**Legal Values**
Values: 1–65535

**Default Value**
Not Applicable

**Write Privilege**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### System.Power.Cap.MinThreshold (Read Only)

**Description**
Because it is based on the current component inventory, it is the lowest calculated power consumption of the device.

**Legal Values**
Values: 1–65535

**Default Value**
Not Applicable

**Write Privilege**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
System.Power.Cap.Percent (Read or Write)

**Description**
Represents the maximum power as a percentage of total power that a server is allowed to consume. To meet this cap, throttle the device.

**NOTE:** This value is applicable only if System.Power.Cap.Enable is set to 1.

**Legal Values**
Values: 0–100

**Default Value**
Server power threshold in percentage.

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Enable System.Power.Cap.Enable

System.Power.Redundancypolicy (Read or Write)

**Description**
Selects the redundancy policy.

**Legal Values**

- 255 — N/A, for the systems that are not supported
- 0 — Not Redundant — In this mode, even if one PSU stops functioning, the server is automatically turned off.
- 1 — Input Power Redundant — In this mode, the system is functional even if one PSU input circuit stops functioning, provided the PSUs are connected to different input circuits. This is also called AC redundancy.
- 2 — PSU Redundant — Available only on systems with four PSUs. This is also called DC redundancy. This is only valid in a 2+1 PSU configuration. In this mode, the system is functional even if one PSU stops functioning.

**Default Value**
N/A

**Write Privilege**
Login and configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**NOTE:** In a two PSU system, you must set the primary PSU (that must be ON). In a four PSU system, you must set the pair of PSUs (1+3 or 2+4) that must be ON.

System.Power.Cap.Watts (Read or Write)

**Description**
Represents the Maximum Power in Watts a device is allowed to consume. To meet this capacity, throttle the device.

**NOTE:** This value is applicable only if System.Power.Cap.Enable is set to 1.

**Legal Values**
Values 0–100

**Default Value**
Server power threshold in watts
Write Privilege Configure iDRAC
License Required iDRAC Express or iDRAC Enterprise
Dependency Enable System.Power.Cap.Enable

**System.Power.EnergyConsumption (Read Only)**

**Description**
Represents the Cumulative power consumption by the blade or system.

**Legal Values**
Values: 1–65535

**Default Value**
Cumulative power consumption

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**System.Power.EnergyConsumption.Clear (Read or Write)**

**Description**
Clears the cumulative power consumption timestamps.

**Legal Values**
1

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**System.Power.EnergyConsumption.StarttimeStamp (Read Only)**

**Description**
Displays the Timestamp of the cumulative power consumption.

**Legal Values**
String of up to 254 ASCII characters

**Default Value**
Timestamp of the cumulative power consumption.

**Write Privilege**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
System.Power.Hotspare.Enable (Read or Write)

Description  Enables hot-spare functionality for the primary PSU selection. For more information about hot-spare, see the iDRAC User’s Guide available at [www.dell.com/esmmanuals](http://www.dell.com/esmmanuals).

**NOTE:** This object is supported only for iDRAC on Rack and Tower servers.

Legal Values
- 0 — Disabled
- 1 — Enabled

Default Value  1 — Enabled

Write Privilege  Configure iDRAC

License Required  iDRAC Express or iDRAC Enterprise

Dependency  None

System.Power.Hotspare.PrimaryPSU (Read or Write)

Description  Represents the primary PSU selection.

**NOTE:** This object is supported only for iDRAC on Rack and Tower servers.

Legal Values
- 1 — PSU1
- 2 — PSU2
- 5 — PSU1 and PSU3
- 10 — PSU2 and PSU4

Default Value  Not Applicable

Write Privilege  Configure iDRAC

License Required  iDRAC Express or iDRAC Enterprise

Dependency  None

System.Power.Max.Amps (Read Only)

Description  Specifies the device Peak Power Consumption since this value was last cleared.

Legal Values  Values: 1–65535.

Default Value  Current peak power consumption

Write Privilege  Not Applicable

License Required  iDRAC Express or iDRAC Enterprise
System.Power.Max.Amps.TimeStamp (Read Only)

**Description**
Specifies the timestamp recorded for the Peak Power Consumption since this value was last cleared.

**Legal Values**
String up to 254 ASCII characters.

**Default Value**
Timestamp of the current peak power consumption

**Write Privilege**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

System.Power.Max.Headroom (Read Only)

**Description**
Displays the difference between the available power and the peak power consumption.

**NOTE:** This object is not applicable on iDRAC on Modular servers.

**Legal Values**
Values: 1–65535

**Default Value**
Difference between the available power and the peak power consumption.

**Write Privilege**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

System.Power.Max.LastDay (Read Only)

**Description**
Displays the maximum power value during the last day.

**Legal Values**
Values: 1–65535

**Default Value**
Maximum power value during the last day.

**Write Privilege**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
System.Power.Max.LastDay.TimeStamp (Read Only)

Description: Displays the timestamp of maximum power value during the last day.
Legal Values: String of up to 254 ASCII characters
Default Value: Timestamp of the maximum power value during the last day.
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

System.Power.Max.LastHour (Read Only)

Description: Displays the maximum power value during the last hour.
Legal Values: Values: 1–65535
Default Value: Maximum power value during the last hour.
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

System.Power.Max.LastHour.TimeStamp (Read Only)

Description: Displays the timestamp of maximum power value during the last hour.
Legal Values: String of up to 254 ASCII characters
Default Value: Timestamp of the maximum power value during the last hour.
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

System.Power.Max.LastWeek (Read Only)

Description: Displays the maximum power value during the last week.
Legal Values: Values: 1–65535
<table>
<thead>
<tr>
<th>Default Value</th>
<th>Maximum power value during the last week.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write Privilege</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

**System.Power.Max.LastWeek.TimeStamp (Read Only)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Displays the timestamp of maximum power value during the last week.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>String of up to 254 ASCII characters</td>
</tr>
<tr>
<td>Default Value</td>
<td>Timestamp of the maximum power value during the last week.</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

**System.Power.Max.Power (Read Only)**

<table>
<thead>
<tr>
<th>Description</th>
<th>The server consumes maximum power, because the last value was cleared.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>Values: 1–65535</td>
</tr>
<tr>
<td>Default Value</td>
<td>Peak power consumption of the server.</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Configure iDRAC</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

**System.Power.Max.Power.Timestamp (Read Only)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Displays time of maximum power consumption.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>String of up to 254 ASCII characters</td>
</tr>
<tr>
<td>Default Value</td>
<td>Timestamp of the peak power consumption of the server.</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Configure iDRAC</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>
System.Power.Max.PowerClear (Read or Write)

- **Description**: Clears the Maximum Power Consumption timestamps.
- **Legal Values**: 1 — Clear the Power Consumption Statistics
- **Default Value**: Not Applicable
- **Write Privilege**: Configure iDRAC
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

System.Power.Min.LastDay (Read Only)

- **Description**: Displays the minimum power during the last day.
- **Legal Values**: Values: 1–65535
- **Default Value**: Minimum power value during the last day.
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

System.Power.Min.LastDay.TimeStamp (Read Only)

- **Description**: Displays the minimum power value during the last day.
- **Legal Values**: String of up to 254 ASCII characters
- **Default Value**: Timestamp of the minimum power value during the last day.
- **Write Privilege**: Configure iDRAC
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None
System.Power.Min.LastHour (Read Only)

- **Description**: Indicates the minimum power value during the last hour.
- **Legal Values**: Values: 1–65535
- **Default Value**: Minimum power value during the last hour.
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

System.Power.Min.LastHour.Timestamp (Read Only)

- **Description**: Indicates the timestamp of minimum power during the last hour.
- **Legal Values**: String of up to 254 ASCII characters
- **Default Value**: Timestamp of the minimum power value during the last hour.
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

System.Power.Min.LastWeek (Read Only)

- **Description**: Indicates the minimum power during the last week.
- **Legal Values**: Values: 1–65535
- **Default Value**: Minimum power value during the last week.
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

System.Power.Min.LastWeek.TimeStamp (Read Only)

- **Description**: Displays the timestamp of minimum power value during the last week.
- **Legal Values**: String of up to 254 ASCII characters
System.Power.PCIeAllocation (Read or Write)

Description
Specifies PCIe power allocation for blade servers. It is applicable only for PowerEdge M610x.

NOTE: This object only applies to servers that support PCIe Card.

Legal Values
- 0 — Disabled
- 1 — Enabled

Default Value
- 0 — For platforms that do not support PCIe cards.
- 500 W — For platforms that support PCIe cards.

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

System.Power.PFCEnable (Read or Write)

Description
Enables the power factor correction enable.

NOTE:
- This object is supported only for iDRAC on Rack and Tower servers.
- This object is applicable only if System.Power.Cap.Enable is set to 1.

Legal Values
- 0 — Disabled
- 1 — Enabled

Default Value
0 — Disabled

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None
System.Power.RedundancyCapabilities (Read Only)

Description: Returns the redundancy capabilities in the form of a bitmask. This bitmask indicates the values that are set to cfgSensorRedundancyPolicy.

NOTE: This object is not applicable for iDRAC on Blade servers.

Legal Values:
- 0 — not applicable
- 1 — Non-Redundant
- 2 — 1+1 Redundant
- 4 — 2+1 Redundant
- 8 — 2+2 Redundant
- 16 — 3+x Redundant
- 32 — 4+x Redundant
- 64 — 5+x Redundant

Default Value: 0 — not applicable

Write Privilege: Not Applicable

License Required: Not Applicable

Dependency: Not Applicable

System.Power.RedundantState (Read Only)

Description: Retrieves the redundancy state for the chassis.

NOTE: This object is not applicable for Rack and Tower server.

Legal Values:
- 0 — None
- 1 — Full

Default: 0 — None

Write Privilege: Not Applicable

License Required: Not Applicable

Dependency: Not Applicable

System.Power.Supply

This group provides information relating to the Power Supplies.

This group is indexed from 1 to 4. If there are less than four power supplies on the server, then some of the last indexes of this group are not applicable. This group is applicable for iDRAC on Rack and Tower servers.

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

- **Description**: Displays the instantaneous current consumption in 0.1 amps.
- **Legal Values**: String of up to 254 ASCII characters
- **Default Value**: Not Applicable
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

**System.Power.Supply.FwVer (Read Only)**

- **Description**: Displays the firmware version of the PSU.
- **Legal Values**: String up to 254 ASCII characters.
- **Default Value**: Not Applicable
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

**System.Power.Supply.[i].MaxInputPower (Read Only)**

- **Description**: Displays the AC input rated power in Watts.
- **Legal Values**: Integer > 0
- **Default Value**: 0
- **Write Privilege**: Not Applicable
- **License Required**: Not Applicable
- **Dependency**: Not Applicable

**System.Power.Supply.[i].MaxOutputPower (Read Only)**

- **Description**: Displays the DC output rated power in Watts.
- **Legal Values**: Integer > 0
System.Power.Supply.[i].Status (Read Only)

Description: Displays the status of the PSU.

Legal Values:
- 0 — absent
- 1 — present and OK
- 2 — failure
- 3 — predictive failure

Default: 0 — absent

System.Power.Supply.[i].Type (Read Only)

Description: Displays whether the power supply is AC or DC. Either of them are indexed group and the square brackets are only place-holders, and do not form a part of command syntax.

Legal Values: String upto 32 characters.

Default: None

System.Power.Supply.[i].LineStatus (Read Only)

Description: Specifies if this power supply is powered off or on.

Legal Values: Integer > 0

Default: None
**System.Power.Supply.[i].PMBusMonitoring (Read Only)**

- **Description**: Specifies if this PMBus is present or not.
- **Legal Values**: Integer > 0
- **Default**: 0
- **Write Privilege**: Not Applicable
- **License Required**: Not Applicable
- **Dependency**: Not Applicable

**System.ServerOS**

Use the objects in this group to manage the host operating system's name and version details.

**System.ServerOS.HostName (Read or Write)**

- **Description**: Displays the host name of the managed server.
- **Legal Values**: String of up to 256 ASCII characters
- **Default Value**: Not Applicable
- **Write Privilege**: Configure iDRAC
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

**System.ServerOS.OSName (Read or Write)**

- **Description**: Displays the operating system name of the managed server.
- **Legal Values**: String of up to 254 ASCII characters
- **Default Value**: Not Applicable
- **Write Privilege**: Configure iDRAC
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None
System.ServerOS.OSVersion (Read Only)

Description: Indicates the operating system version of the managed server.
Legal Values: String of up to 254 ASCII characters
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

System.ServerOS.ServerPoweredOnTime (Read Only)

Description: Indicates the time (in seconds) from when the operating system is turned ON.
Legal Values: Any integer value indicating the system powered on time duration.
Default Value: 0
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

System.ThermalSettings

This group provides information about the thermal settings of the server.

To know more about the platforms supported for AirExhaustTemp and FanSpeedOffset settings, see the iDRAC User’s Guide available at www.dell.com/esmmanuals.

System.ThermalSettings.AirExhaustTemp (Read or Write)

Description: Displays the air exhaust temperature and sets the exhaust temperature to any appropriate value.

<table>
<thead>
<tr>
<th>Legal Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 — 40°C</td>
</tr>
<tr>
<td>1 — 45°C</td>
</tr>
<tr>
<td>2 — 50°C</td>
</tr>
<tr>
<td>3 — 55°C</td>
</tr>
<tr>
<td>255 — None</td>
</tr>
</tbody>
</table>

Default value: 255 — None
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None
System.ThermalSettings.BaseAlgorithm (Read or Write)

**Description**
Specifies the thermal base algorithm.

**NOTE:** This object is not applicable for Rack and Tower server.

**Legal Values**
- 0 — Auto
- 1 — Max Exhaust Temperature
- 2 — Min Power

**Default values**
None

**License Required**
IDRAC Express

**Dependency**
None

System.ThermalSettings.MinimumFanSpeed (Read or Write)

**Description**
Specifies the minimum fan speed required.

**NOTE:** This attribute is platform dependent.

**Legal Values**
MFSMinimumLimit — MFSMaximumLimit

**Default Value**
0

**Write Privilege**
Not Applicable

**License Required**
IDRAC Express or IDRAC Enterprise

**Dependency**
None

System.ThermalSettings.FanSpeedOffset (Read or Write)

**Description**
Specifies the fan speed offset.

**NOTE:** This attribute is platform dependent.

**Legal Values**
- 0 — Low fan speed
- 1 — High fan speed
- 255 — OFF

**Default value**
OFF

**License Required**
IDRAC Express or IDRAC Enterprise

**Dependency**
None

System.ThermalSettings.FanSpeedLowOffsetVal (Read Only)

**Description**
Indicates the percentage range for low fan Offset speed.
This attribute is platform dependent.

**System.ThermalSettings.FanSpeedMediumOffsetVal (Read Only)**

- **Description**: Indicates the percentage range for medium fan speed offset.
- **Legal Values**: Integral Values: 0 – 100
- **Default Value**: 0
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

This attribute is platform dependent.

**System.ThermalSettings.FanSpeedHighOffsetVal (Read Only)**

- **Description**: Indicates the percentage range for high fan offset speed.
- **Legal Values**: Integral Values: 0 – 100
- **Default Value**: 0
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

This attribute is platform dependent.

**System.ThermalSettings.FanSpeedMaxOffsetVal (Read Only)**

- **Description**: Indicates the percentage range for low fan offset speed.
- **Legal Values**: Integral Values: 0 – 100
- **Default Value**: 0
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

This attribute is platform dependent.
System.ThermalSettings.MFSMinimumLimit (Read Only)

Description: Indicates the minimum limit for MFS.

| NOTE: This attribute is platform dependent. |

Legal Values: Integral Values: 0 — MFSMaximumLimit
Default Value: 225
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

System.ThermalSettings.MFSMaximumLimit (Read Only)

Description: Indicates the maximum limit for MFS.

| NOTE: This attribute is platform dependent. |

Legal Values: Integral Values: 1 - 100
Default Value: 255
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

System.ThermalSettings.ThermalProfile (Read or Write)

Description: Sets the thermal base algorithm.

| NOTE: Restart the system to activate the power and thermal settings. |

Legal Values:
- 0 — Default Thermal Profile Settings
- 1 — Maximum performance
- 2 — Minimum Power
Default Value: Auto
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

System.ThermalSettings.ThirdPartyPCIFanResponse (Read or Write)

Description: Enables or disables the automatic fan speed feature when a third-party PCI card is inserted in the system.

Legal Values:
- 0 — Disabled
System.ThermalConfig

The objects in this group manage the thermal configuration.

System.ThermalConfig.CriticalEventGenerationInterval (Read or Write)

- **Description**: Indicates the time interval (in days) for critical events to be generated.
- **Legal Values**: Integral Values: 0-365
- **Default Value**: 30
- **Write Privilege**: Configure iDRAC
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

System.ThermalConfig.EventGenerationInterval (Read or Write)

- **Description**: Indicates the time interval (in days) for warning events to be generated.
- **Legal Values**: Integral Values: 0-365
- **Default Value**: 30
- **Write Privilege**: Configure iDRAC
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

System.ThermalConfig.FreshAirCompliantConfiguration (Read Only)

- **Description**: Indicates whether or not the system is configured to be fresh air compliant.
- **Legal Values**:
  - 0 — Not Applicable
  - 1 — Yes
  - 2 — No
NOTE: A job successfully configured using the autoupdate or autobackup feature settings can be deleted only if the job is currently not running or downloading.

LifecycleController.LCAttributes.autobackup (Read or Write)

Description:
Enables or disables the automatic backup scheduler.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value:
0 — Disabled

Write Privilege:
Server Control

License Required:
iDRAC Enterprise

Dependency:
None

LifecycleController.LCAttributes.AutoDiscovery (Read Only)

Description:
Enables or disables the auto discovery scheduler.

Legal Values:
- 0 — Off
- 1 — ON

Default Value:
0 — Off

License Required:
iDRAC Enterprise

Dependency:
None

LifecycleController.LCAttributes.autoupupdate (Read or Write)

Description:
Enables or disables the automatic update scheduler.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value:
1 — Enabled

Write Privilege:
Server Control

License Required:
iDRAC Enterprise

Dependency:
None
### LifecycleController.LCAttributes.BiosRTDRequested (Read or Write)

**Description**
Reset all the BIOS attributes to the default state. Set the value to 1, and restart the server to reset the BIOS attributes to factory default. After the server restart, the value is set to 0 by default.

**Legal Values**
- 0 — FALSE
- 1 — TRUE

**Default Value**
0 — FALSE

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### LifecycleController.LCAttributes.CollectSystemInventoryOnRestart (Read or Write)

**Description**
Enables or disables collection of system inventory on host reboot.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
1 — Enabled

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### LifecycleController.LCAttributes.DiscoveryFactoryDefaults (Read Only)

**Description**
Enables or disables the discovery factory defaults.

**Legal Values**
- 0 — Off
- 1 — On

**Default Value**
0 — Off

**Write Privilege**
Not Applicable

**License Required**
iDRAC Enterprise
**LifecycleController.LCAttributes.IPChangeNotifyPS (Read or Write)**

**Description**
Notifies the provisioning server about the change in IP address.

**Legal Values**
- 0 — Off
- 1 — On

**Default Value**
0 — Off

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Enterprise

**Dependency**
None

**LifecycleController.LCAttributes.Licensed (Read Only)**

**Description**
Indicates whether or not the part replacement feature is licensed.

**Legal Values**
- 0 — No
- 1 — Yes

**Default Value**
0 — No

**License Required**
iDRAC Enterprise

**Dependency**
None

**LifecycleController.LCAttributes.LifecycleControllerState (Read or Write)**

**Description**
Enables or disables lifecycle controller.

**Legal Values**
- 0 — Disabled
- 1 — Enabled
- 2 — Recovery (Read Only Value)

**Default Value**
1 — Enabled

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
LifecycleController.LCAttributes.ProvisioningServer (Read or Write)

Description: Specifies the Provisioning Server Address.
Legal Values: String of up to 255 ASCII characters
Default Value: Not Applicable
Write Privilege: Configure iDRAC
License Required: iDRAC Enterprise
Dependency: None

LifecycleController.LCAttributes.PartConfigurationUpdate (Read or Write)

Description: Apply hardware configuration to the replaced part on part replacement.
Legal Values:
- 0 — Disabled
- 1 — Apply Always
- 2 — Apply only if Firmware Match
Default Value: 0 — Disabled
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

LifecycleController.LCAttributes.PartFirmwareUpdate (Read or Write)

Description: Apply firmware changes to the replaced part on part replacement.
Legal Values:
- 0 — Disabled
- 1 — Allow version upgrade only
- 2 — Match firmware of replaced part
Default Value: 2 — Match firmware of replaced part
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
**LifecycleController.LCAttributes.SystemID (Read Only)**

- **Description**: Specifies the Dell System ID.
- **Legal Values**: Not Applicable
- **Default Value**: None
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Enterprise
- **Dependency**: None

**LifecycleController.LCAttributes.VirtualAddressManagementApplication (Read or Write)**

- **Description**: Specifies the console name of Virtual Address Management Application.
- **Legal Values**: String of up to 32 ASCII characters
- **Default Value**: Not Applicable
- **Write Privilege**: Configure iDRAC
- **License Required**: iDRAC Enterprise
- **Dependency**: None

**iDRAC.ActiveDirectory**

To manage the configuration of the iDRAC Active Directory features, use the objects in this group.

**iDRAC.ActiveDirectory.AuthTimeout (Read or Write)**

- **Description**: To wait for ActiveDirectory authentication requests to complete before timing out, specify the time in seconds.
- **Legal Values**: Integral values: 15–300
- **Default Value**: 120
- **Write Privilege**: Configure iDRAC
- **License Required**: iDRAC Enterprise
- **Dependency**: None
iDRAC.ActiveDirectory.CertValidationEnable (Read or Write)

Description: Enables or disables Active Directory certificate validation as a part of the Active Directory configuration process.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: iDRAC Enterprise

Dependency: None

iDRAC.ActiveDirectory.DCLookupByUserDomain (Read or Write)

Description: To look up the user domain for Active Directory, enables the selection option.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: 0 — Disabled

Write Privilege: Configure iDRAC

License Required: iDRAC Enterprise

Dependency: Cannot be disabled unless the DC Lookup Domain Name is set.

iDRAC.ActiveDirectory.DCLookupDomainName (Read or Write)

Description: The configured search domain is used when DCLookupByUserDomain is disabled.

Legal Values: String of up to 254 ASCII characters

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: iDRAC Enterprise

Dependency: None
iDRAC.ActiveDirectory.DCLookupEnable (Read or Write)

Description
Configures iDRAC to use preconfigured domain controllers or to use DNS to find the domain controller.

Legal Values
• 0 — Disabled
• 1 — Enabled

Default Value
0 — Disabled

Write Privilege
Configure iDRAC

License Required
iDRAC Enterprise

Dependency
Cannot be enabled unless one of the following is configured:
• IPv4.DNS1
• IPv4.DNS2
• IPv6.DNS1
• IPv6.DNS2

iDRAC.ActiveDirectory.DomainController1 (Read or Write)

Description
FQDN that stores the address of the active directory domain controller 1.

Legal Values
String of up to 254 ASCII characters

Default Value
Not Applicable

Write Privilege
Configure iDRAC

License Required
iDRAC Enterprise

Dependency
None

iDRAC.ActiveDirectory.DomainController2 (Read or Write)

Description
FQDN that stores the address of the active directory domain controller 2

Legal Values
String of up to 254 ASCII characters

Default Value
Not Applicable

Write Privilege
Configure iDRAC

License Required
iDRAC Enterprise

Dependency
None
**iDRAC.ActiveDirectory.DomainController3 (Read or Write)**

**Description**
FQDN that stores the address of the active directory domain controller 3

**Legal Values**
String of up to 254 ASCII characters

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Enterprise

**Dependency**
None

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**iDRAC.ActiveDirectory.Enable (Read or Write)**

**Description**
Enables or disables Active Directory user authentication on iDRAC.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
0 — Disabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Enterprise

**Dependency**
None

---

**iDRAC.ActiveDirectory.GCLookupEnable (Read or Write)**

**Description**
Determines how to look up the global catalog server.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
0 — Disabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Enterprise

**Dependency**
Cannot be enabled unless one of the following is configured:
- IPv4.DNS1
- IPv4.DNS2
- IPv6.DNS1
iDRAC.ActiveDirectory.GCRootDomain (Read or Write)

Description: The names of the Active Directory root domain used for DNS look up.

Legal Values: String of up to 254 ASCII characters

Write Privilege: Not Applicable

License Required: None

Dependency: None

iDRAC.ActiveDirectory.GlobalCatalog1 (Read or Write)

Description: Specifies the Global Catalog server from which you want the iDRAC to obtain user names.

Legal Values: String of up to 254 ASCII characters

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: IDRAC Enterprise

Dependency: None

iDRAC.ActiveDirectory.GlobalCatalog2 (Read or Write)

Description: To obtain user names, specifies the Global Catalog server from which you want the iDRAC.

Legal Values: String of up to 254 ASCII characters

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: IDRAC Enterprise

Dependency: None
iDRAC.ActiveDirectory.GlobalCatalog3 (Read or Write)

Description: To obtain user names, specifies the Global Catalog server from which you want the iDRAC.

Legal Values: String of up to 254 ASCII characters

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: iDRAC Enterprise

Dependency: None

iDRAC.ActiveDirectory.RacDomain (Read or Write)

Description: Active Directory Domain in which iDRAC resides.

Legal Values: String of up to 254 ASCII characters

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: iDRAC Enterprise

Dependency: None

iDRAC.ActiveDirectory.RacName (Read or Write)

Description: Name of iDRAC as recorded in the Active Directory forest.

Legal Values: String of up to 254 ASCII characters

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: iDRAC Enterprise

Dependency: None

iDRAC.ActiveDirectory.Schema (Read or Write)

Description: To use with Active Directory, determine the schema type.

Legal Values: 1 — Extended Schema
iDRAC.ActiveDirectory.SSOEnable (Read or Write)

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

Legal Values
- 0 — Disabled
- 1 — Enabled

Default Value
0 — Disabled

Write Privilege
Configure iDRAC

License Required
iDRAC Enterprise

Dependency
Cannot be enabled unless SmartCard Logon Enable is disabled.

iDRAC.ADGroup

To manage the configuration of AD standard schema settings, use these objects in the group. This group is indexed from 1 to 5.

iDRAC.ADGroup.Domain (Read or Write)

Description
Active Directory Domain in which the Role Group resides.

Legal Values
String of up to 254 ASCII characters

Default Value
Not Applicable

Write Privilege
Configure iDRAC

License Required
iDRAC Enterprise

Dependency
None
iDRAC.ADGroup.Name (Read or Write)

Description: Name of the Role Group as recorded in the Active Directory forest.
Legal Values: String of up to 254 ASCII characters
Default Value: Not Applicable
Write Privilege: Configure iDRAC
License Required: iDRAC Enterprise
Dependency: None

iDRAC.ADGroup.Privilege (Read or Write)

Description: Role-based authority privileges for a Role Group.
Legal Values: Integral values: 0–511 (0x1FF)
Default Value: 0
Write Privilege: Configure iDRAC
License Required: iDRAC Enterprise
Dependency: None

iDRAC.AutoOSLock

To manage the OS Auto lock feature, use these objects in this group.

iDRAC.AutoOSLock.AutoOSLockState (Read or Write)

Description: Enable or Disable OS Auto lock feature.
Legal Values:
- 0 — Disabled
- 1 — Enabled
Default Value: 1 — Enabled
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None
iDRAC.EmailAlert

The objects in this group configure email alerting capabilities. This group is indexed from 1 to 4.

iDRAC.EmailAlert.Address (Read or Write)

Description: Specifies the destination email address for email alerts.

Legal Values: A valid IPv4 or IPv6 address

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.EmailAlert.CustomMsg (Read or Write)

Description: Specifies the custom message that forms the subject of the alert.

Legal Values: A string of up to 32 ASCII characters

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.EmailAlert.Enable (Read or Write)

Description: To receive alerts, enable or disable the destination.

Legal Values: 0 — Disabled

Default Value: 0 — Disabled

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None
iDRAC.Info

To manage information about iDRAC being queried, use these objects in the group.

iDRAC.Info.Build (Read or Write)

Description: String containing the current product build version.
Legal Values: String of up to 16 ASCII characters
Default Value: Not Applicable
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

iDRAC.Info.Description (Read or Write)

Description: Text description of the iDRAC.
Legal Values: String of up to 255 ASCII characters
Default Value: The system component provides a set of remote management operations for Dell PowerEdge Servers.
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

iDRAC.Info.Name (Read or Write)

Description: User assigned name identifying this controller.
Legal Values: String of up to 15 ASCII characters
Default Value: Not Applicable
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None
### iDRAC.Info.Product (Read or Write)

**Description**
String identifying the Product.

**Legal Values**
String of up to 63 ASCII characters

**Default Value**
Integrated Dell Remote Access Controller

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### iDRAC.Info.Type (Read or Write)

**Description**
Identifies the remote access controller type

**Legal Values**
- 16 (12G iDRAC Monolithic)
- 17 (12G iDRAC Modular)

**Default Value**
12G Monolithic

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### iDRAC.Info.Version (Read Only)

**Description**
String containing the current product firmware version.

**Legal Values**
String of up to 63 ASCII characters

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
iDRAC.Info.ServerGen (Read or Write)

Description  Indicates the server generation.
Legal Values  String of up to 12 ASCII characters
Default Value  Not Applicable
Write Privilege  Configure iDRAC
License Required  iDRAC Express or iDRAC Enterprise
Dependency  None

iDRAC.IOIDOpt

The objects in this group manage the IOIDOpt attributes.

iDRAC.IOIDOptEnable (Read or Write)

Description  Enables or disables Identity Optimization (IO).
Legal Values  
  • 0 — Disabled
  • 1 — Enabled
Default values  0 — Disabled
Write Privilege  Configure iDRAC
License Required  iDRAC Express or iDRAC Enterprise
Dependency  None

iDRAC.IOIDOpt.InitiatorPersistencePolicy (Read or Write)

Description  Sets the virtual address management.
Legal Values  
  • 0 — None
  • 1 — WarmReset
  • 2 — PowerGoodReset
  • 3 — WarmReset, PowerGoodReset
  • 4 — ACPowerLoss
  • 5 — WarmReset, ACPowerLoss
  • 6 — PowerGoodReset, ACPowerLoss
  • 7 — WarmReset, PowerGoodReset, ACPowerLoss
Default Value  7 — WarmReset, PowerGoodReset, ACPowerLoss
Write Privilege  Configure iDRAC and Server Control
License Required  iDRAC Express or iDRAC Enterprise
**iDRAC.IOIDOpt.StorageTargetPersistencePolicy** (Read or Write)

**Description**
Sets the Virtual Address Management StorageTargetPersistencePolicy.

**Legal Values**
- 0 — None
- 1 — WarmReset
- 2 — PowerGoodReset
- 3 — WarmReset, PowerGoodReset
- 4 — ACPowerLoss
- 5 — WarmReset, ACPowerLoss
- 6 — PowerGoodReset, ACPowerLoss
- 7 — WarmReset, PowerGoodReset, ACPowerLoss

**Default Value**
ACPowerLoss, PowerGoodReset, WarmReset

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
To configure, the iDRAC.IOIDOpt.Enable property must indicate Enabled.

**iDRAC.IOIDOpt.VirtualAddressPersistencePolicyAuxPwrd** (Read or Write)

**Description**
Applied for the Aux powered devices, which persist the virtual address on cold and warm reset.

**Legal Values**
- 0 — None
- 1 — WarmReset
- 2 — PowerGoodReset
- 3 — WarmReset, PowerGoodReset
- 4 — ACPowerLoss
- 5 — WarmReset, ACPowerLoss
- 6 — PowerGoodReset, ACPowerLoss
- 7 — WarmReset, PowerGoodReset, ACPowerLoss

**Default Value**
ACPowerLoss, PowerGoodReset, WarmReset

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
To configure, the iDRAC.IOIDOpt.Enable property must indicate Enabled.
**iDRAC.IOIDOpt.VirtualAddressPersistencePolicyNonAuxPwrd (Read or Write)**

- **Description**: Applied for the Non-Aux powered devices, which persist the virtual address on warm reset.
- **Legal Values**
  - 0 — None
  - 1 — WarmReset
  - 2 — PowerGoodReset
  - 3 — WarmReset, PowerGoodReset
  - 4 — ACPowerLoss
  - 5 — WarmReset, ACPowerLoss
  - 6 — PowerGoodReset, ACPowerLoss
  - 7 — WarmReset, PowerGoodReset, ACPowerLoss
- **Default Value**: ACPowerLoss, PowerGoodReset, WarmReset
- **Write Privilege**: Configure iDRAC
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: To configure, the iDRAC.IOIDOpt.Enable property must indicate Enabled.

**iDRAC.IPBlocking**

To configure IP address blocking feature of iDRAC, Use the objects in this group.

**iDRAC.IPBlocking.BlockEnable (Read or Write)**

- **Description**: Enables or disables the IPv4 address blocking feature of iDRAC.
- **Legal Values**
  - 0 — Disabled
  - 1 — Enabled
- **Write Privilege**: Configure iDRAC
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

**iDRAC.IPBlocking.FailCount (Read or Write)**

- **Description**: The maximum number of logins that are unsuccessful to occur within the window before logs in attempts from the IP address are rejected.
- **Legal Values**: Integral values: 2–16
<table>
<thead>
<tr>
<th><strong>Write Privilege</strong></th>
<th>Configure iDRAC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>License Required</strong></td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td><strong>Dependency</strong></td>
<td>None</td>
</tr>
</tbody>
</table>

### iDRAC.IPBlocking.FailWindow (Read or Write)

**Description**
- Defines the time span in seconds that the unsuccessful attempts are counted.

**Legal Values**
- Integral values from 10 to 65535

**Write Privilege**
- Configure iDRAC

**License Required**
- iDRAC Express or iDRAC Enterprise

**Dependency**
- None

### iDRAC.IPBlocking.PenaltyTime (Read or Write)

**Description**
- Defines the time span in seconds that session requests from an IP address with excessive failures are rejected.

**Legal Values**
- Integral values: 2–65535

**Write Privilege**
- Configure iDRAC

**License Required**
- iDRAC Express or iDRAC Enterprise

**Dependency**
- None

### iDRAC.IPBlocking.RangeAddr (Read or Write)

**Description**
- Specifies the acceptable IPv4 address bit pattern in positions determined by the 1s in the range mask.

**Legal Values**
- Valid IPv4 Address

**Default Value**
- 192.168.0

**Write Privilege**
- Configure iDRAC

**License Required**
- iDRAC Express or iDRAC Enterprise

**Dependency**
- None
iDRAC.IPBlocking.RangeEnable (Read or Write)

Description: Enables or disables the IPv4 Address Range validation feature of iDRAC.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: 0 — Disabled

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.IPBlocking.RangeMask (Read or Write)

Description: Standard IP mask values with left-justified bits.

Legal Values: Valid IPv4 Address Mask

Default Value: 255.255.255.0

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.IPMILan

To configure IPMI over LAN of the system, use the objects in this group.

iDRAC.IPMILan.AlertEnable (Read or Write)

Description: Enables or disables global email alerting.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: 0 — Disabled

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise
iDRAC.IPMILan.CommunityName (Read or Write)

Description: Specifies the SNMP community name for traps.
Legal Values: String of up to 18 ASCII characters
Default Value: Public
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

iDRAC.IPMILan.Enable (Read or Write)

Description: Enables or disables the IPMI over LAN interface.
Legal Values:
- 0 — Disabled
- 1 — Enabled
Default Value: 0 — Disabled
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

iDRAC.IPMILan.EncryptionKey (Read or Write)

Description: Enables or disables the IPMI over LAN interface.
Legal Values: String of up to 18 ASCII characters
Default Value: 00000000000000000000000000000000
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None
iDRAC.IPMILan.PrivLimit (Read or Write)

**Description**
Specifies the maximum privilege level for IPMI over LAN access.

**Legal Values**
- 2 — User
- 3 — Operator
- 4 — Administrator

**Default Value**
4 — Administrator

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

iDRAC.IPMISerial

To configure the IPMI serial interface, use this objects in this group.

**NOTE:** This is supported only for rack and tower systems.

iDRAC.IPMISerial.BaudRate (Read or Write)

**Description**
Specifies the baud rate for serial connection over IPMI.

**Legal Values**
- 9600
- 19200
- 57600
- 115200

**Default Value**
115200

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

iDRAC.IPMISerial.ChanPrivLimit (Read or Write)

**Description**
Specifies the maximum privilege limit allowed on the IPMI serial channel.

**Legal Values**
- 2 — User
- 3 — Operator
iDRAC.IPMISerial.ConnectionMode (Read or Write)

Description
Determines the IPMI defined mode of the serial port.

Legal Values
- 1 — Basic
- 0 — Terminal

Default Value
1 — Basic

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

iDRAC.IPMISerial.DeleteControl (Read or Write)

Description
Enables or disables delete control on the IPMI serial interface.

Legal Values
- 0 — Disabled
- 1 — Enabled

Default Value
0 — Disabled

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

iDRAC.IPMISerial.EchoControl (Read or Write)

Description
Enables or disables echo control on the IPMI serial interface.

Legal Values
- 0 — Disabled
- 1 — Enabled

**Default Value**

1 — Enabled

**Write Privilege**

Configure iDRAC

**License Required**

iDRAC Express or iDRAC Enterprise

**Dependency**

None

### `iDRAC.IPMISerial.FlowControl (Read or Write)`

**Description**

Specifies the Flow Control setting for IPMI serial port.

**Legal Values**

- 0 — None
- 2 — RTS or CTS

**Default Value**

2 — RTS or CTS

**Write Privilege**

Configure iDRAC

**License Required**

iDRAC Express or iDRAC Enterprise

**Dependency**

None

### `iDRAC.IPMISerial.HandshakeControl (Read or Write)`

**Description**

Enables or disables the IPMI terminal mode handshake control.

**Legal Values**

- 0 — Disabled
- 1 — Enabled

**Default Value**

1 — Enabled

**Write Privilege**

Configure iDRAC

**License Required**

iDRAC Express or iDRAC Enterprise

**Dependency**

None

### `iDRAC.IPMISerial.InputNewLineSeq (Read or Write)`

**Description**

Specifies the input new line sequence for the IPMI serial interface.

**Legal Values**

- 1 — Enter
- 2 — Null
Default Value 2 — Null

Write Privilege Configure iDRAC

License Required iDRAC Express or iDRAC Enterprise

Dependency None

### iDRAC.IPMISerial.LineEdit (Read or Write)

**Description** Enables or disables line editing on the IPMI serial interface.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value** 1 — Enabled

**Write Privilege** Configure iDRAC

**License Required** iDRAC Express or iDRAC Enterprise

**Dependency** None

### iDRAC.IPMISerial.NewLineSeq (Read or Write)

**Description** Specifies the new line sequence for the IPMI serial interface.

**Legal Values**
- 0 — None
- 1 — CR-LF
- 2 — Null
- 3 — CR
- 4 — LF-CR
- 5 — LF

**Default Value** 1 — CR-LF

**Write Privilege** Configure iDRAC

**License Required** iDRAC Express or iDRAC Enterprise

**Dependency** None

### iDRAC.IPMISOL

Use the objects in this group to configure the SOL capabilities of the system.
iDRAC.IPMISOL.AccumulateInterval (Read or Write)

Description: Specifies the typical amount of time that iDRAC waits before transmitting a partial SOL character data packet.

Legal Values: Integral values: 1–255

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.IPMISOL.BaudRate (Read or Write)

Description: Specifies the Baud rate for serial communication over LAN.

Legal Values:
- 9600
- 19200
- 57600
- 115200

Default Value: 115200

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.IPMISOL.Enable (Read or Write)

Description: Enables or disables SOL.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: 1 — Enabled

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None
iDRAC.IPMISOL.MinPrivilege (Read or Write)

Description: Specifies the minimum privilege level required for serial access.

Legal Values:
- 2 — User
- 3 — Operator
- 4 — Administrator

Default Value: 4 — Administrator

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.IPMISOL.SendThreshold (Read or Write)

Description: To buffer before sending an SOL data packet, specifies the SOL threshold limit value and the maximum number of bytes.

Legal Values: Integral values: 1–255

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.IPv4

To manage the IPv4 configuration properties of iDRAC, use these objects in this group.

iDRAC.IPv4.Address (Read or Write)

Description: The current IPv4 address assigned to iDRAC.

Legal Values: Valid IPv4 Address

Default Value: 192.168.0

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise
Dependency Cannot be set unless IPv4.DHCPEnable is disabled.

**iDRAC.IPv4.DHCPEnable (Read or Write)**

**Description**
Specifies if DHCP is used to assign the iDRAC IPv4 address.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
0 — Disabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Cannot be enabled unless IPv4.Enable is enabled.

**iDRAC.IPv4.DNS1 (Read or Write)**

**Description**
IPv4 address for DNS server 1.

**Legal Values**
Valid IPv4 Address

**Default Value**
0.0.0.0

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Cannot be set unless IPv4.DNSFromDHCP is disabled.

**iDRAC.IPv4.DNS2 (Read or Write)**

**Description**
IPv4 address for DNS Server 2.

**Legal Values**
Valid IPv4 Address

**Default Value**
0.0.0.0

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Cannot be set unless IPv4.DNSFromDHCP is disabled.
iDRAC.IPv4.DNSFromDHCP (Read or Write)

Description: Specifies if the DNS server IPv4 addresses must be assigned from the DHCP server on the network.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: 0 — Disabled

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Cannot be enabled unless IPv4.DHCPEnable is enabled.

iDRAC.IPv4.Enable (Read or Write)

Description: Enables or disables the iDRAC IPv4 stack.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: 1 — Enabled

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.IPv4.Gateway (Read or Write)

Description: The gateway for the iDRAC IPv4 address.

Legal Values: Valid IPv4 gateway

Default Value: 192.168.0

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Cannot be set unless IPv4.DHCPEnable is disabled.
### iDRAC.IPv4.Netmask (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>The subnet mask used for the iDRAC IPv4 address.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>Valid IPv4 netmask</td>
</tr>
<tr>
<td>Default Value</td>
<td>255.255.255.0</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Configure iDRAC</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>Cannot be set unless IPv4.DHCPEnable is disabled.</td>
</tr>
</tbody>
</table>

### iDRAC.IPv4Static

Use the objects in this group to manage the IPv4 Static configuration properties of iDRAC.

### iDRAC.IPv4Static.Address (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>iDRAC static IPv4 address. This address can be configured even when DHCP is enabled.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>Valid IPv4 Address</td>
</tr>
<tr>
<td>Default Value</td>
<td>192.168.0</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Configure iDRAC</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

### iDRAC.IPv4Static.DNS1 (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Statically configurable DNS Server 1.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>Valid IPv4 Address</td>
</tr>
<tr>
<td>Default Value</td>
<td>0.0.0.0</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Configure iDRAC</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>
iDRAC.IPv4Static.DNS2 (Read or Write)

Description: Statically configurable DNS Server 2.

Legal Values: Valid IPv4 Address

Default Value: 0.0.0.0

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.IPv4Static.DNSFromDHCP (Read or Write)

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

Legal Values: 0 — Disabled

Default Value: 0 — Disabled

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.IPv4Static.Gateway (Read or Write)

Description: iDRAC static IPv4 gateway. This address can be configured even when DHCP is enabled.

Legal Values: Valid IPv4 gateway

Default Value: 192.168.0

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None
iDRAC.IPv4Static.Netmask (Read or Write)

Description: iDRAC static IPv4 subnet mask. This address can be configured even when DHCP is enabled.

Legal Values: Valid IPv4 netmask

Default Value: 255.255.255.0

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.IPv6

To manage the IPv6 configuration properties of iDRAC, use the objects in this group.

iDRAC.IPv6.Address 1 (Read or Write)

Description: iDRAC IPv6 Address.

Legal Values: Valid IPv6 Address

Default Value: ::

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Cannot be set unless IPv6.AutoConfig is disabled.

iDRAC.IPv6.Address 2 (Read or Write)

Description: iDRAC IPv6 second address.

Legal Values: Valid IPv6 Address

Default Value: ::

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None
iDRAC.IPv6.Address 3 (Read or Write)

Description  iDRAC IPv6 third address.
Legal Values  Valid IPv6 Address
Default Value  ::
Write Privilege  Configure iDRAC
License Required  iDRAC Express or iDRAC Enterprise
Dependency  None

iDRAC.IPv6.Address 4 (Read or Write)

Description  iDRAC IPv6 fourth address.
Legal Values  Valid IPv6 Address
Default Value  ::
Write Privilege  Configure iDRAC
License Required  iDRAC Express or iDRAC Enterprise
Dependency  None

iDRAC.IPv6.Address 5 (Read or Write)

Description  iDRAC IPv6 fifth address.
Legal Values  Valid IPv6 Address
Default Value  ::
Write Privilege  Configure iDRAC
License Required  iDRAC Express or iDRAC Enterprise
Dependency  None

iDRAC.IPv6.Address 6 (Read or Write)

Description  iDRAC IPv6 sixth address.
Legal Values  Valid IPv6 Address
iDRAC.IPv6.Address 7 (Read or Write)

Description: iDRAC IPv6 seventh address.
Legal Values: Valid IPv6 Address
Default Value: ::
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

iDRAC.IPv6.Address 8 (Read or Write)

Description: iDRAC IPv6 eighth address.
Legal Values: Valid IPv6 Address
Default Value: ::
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

iDRAC.IPv6.Address 9 (Read or Write)

Description: iDRAC IPv6 ninth address.
Legal Values: Valid IPv6 Address
Default Value: ::
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None
iDRAC.IPv6.Address10 (Read or Write)

- **Description**: iDRAC IPv6 tenth address.
- **Legal Values**: Valid IPv6 Address
- **Default Value**: ::
- **Write Privilege**: Configure iDRAC
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

iDRAC.IPv6.Address11 (Read or Write)

- **Description**: iDRAC IPv6 eleventh address.
- **Legal Values**: Valid IPv6 Address
- **Default Value**: ::
- **Write Privilege**: Configure iDRAC
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

iDRAC.IPv6.Address12 (Read or Write)

- **Description**: iDRAC IPv6 twelfth address.
- **Legal Values**: Valid IPv6 Address
- **Default Value**: ::
- **Write Privilege**: Configure iDRAC
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

iDRAC.IPv6.Address13 (Read or Write)

- **Description**: iDRAC IPv6 thirteenth address.
- **Legal Values**: Valid IPv6 Address
Default Value ::
Write Privilege Configure iDRAC
License Required iDRAC Express or iDRAC Enterprise
Dependency None

iDRAC.IPv6.Address14 (Read or Write)
Description iDRAC IPv6 fourteenth address.
Legal Values Valid IPv6 Address
Default Value ::
Write Privilege Configure iDRAC
License Required iDRAC Express or iDRAC Enterprise
Dependency None

iDRAC.IPv6.Address15 (Read or Write)
Description iDRAC IPv6 fifteenth address.
Legal Values Valid IPv6 Address
Default Value ::
Write Privilege Configure iDRAC
License Required iDRAC Express or iDRAC Enterprise
Dependency None

iDRAC.IPv6.AutoConfig (Read or Write)
Description Enables or disables the iDRAC IPv6 auto configuration option.
Legal Values
- 0 — Disabled
- 1 — Enabled
Default Value 1 — Enabled
Write Privilege Configure iDRAC
License Required iDRAC Express or iDRAC Enterprise
iDRAC.IPv6.DNS1 (Read or Write)

Description: IPv6 DNS Server 1 Address.
Legal Values: Valid IPv6 Address
Default Value: ::
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: Cannot be set unless IPv6.DNSFromDHCP6 is disabled.

iDRAC.IPv6.DNS2 (Read or Write)

Description: IPv6 DNS Server 2 Address.
Legal Values: Valid IPv6 Address
Default Value: ::
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: Cannot be set unless IPv6.DNSFromDHCP6 is disabled.

iDRAC.IPv6.DNSFromDHCP6 (Read or Write)

Description: Specifies if the DNS Server addresses are obtained from DHCP or not.
Legal Values:
  - 0 — Disabled
  - 1 — Enabled
Default Value: 0 — Disabled
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: Cannot be Enabled unless IPv6.AutoConfig is enabled.
### iDRAC.IPv6.Enable (Read or Write)

**Description**
Enables or Disables iDRAC IPv6 stack.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
0 — Disabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### iDRAC.IPv6.Gateway (Read or Write)

**Description**
IDRAC IPv6 Gateway

**Legal Values**
Valid IPv6 gateway

**Default Value**
::

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Cannot be set unless IPv6.AutoConfig is disabled.

### iDRAC.IPv6.LinkLocalAddress (Read or Write)

**Description**
IDRAC IPv6 Link Local Address.

**Legal Values**
Valid IPv6 Address

**Default Value**
::

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
iDRAC.IPv6.PrefixLength (Read or Write)

Description
Prefix length for the iDRAC IPv6 Address.

Legal Values
Integral values: 1–128

Default Value
64

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

iDRAC.IPv6Static

To manage the IPv6 static configuration properties of iDRAC, use the objects in this group

iDRAC.IPv6Static.Address1 (Read or Write)

Description
iDRAC static IPv6 address.

Legal Values
Valid IPv6 Address

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

iDRAC.IPv6Static.DNS1 (Read or Write)

Description
Statically configurable DNS Server 1.

Legal Values
Valid IPv6 Address

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None
iDRAC.IPv6Static.DNS2 (Read or Write)

Description: Statically configurable DNS Server 2.

Legal Values: Valid IPv6 Address

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.IPv6Static.DNSFromDHCP6 (Read or Write)

Description: Specifies if the DNS server IPv6 addresses must be assigned from the DHCP server on the network.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: 0 — Disabled

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.IPv6Static.Gateway (Read or Write)

Description: iDRAC static IPv6 gateway.

Legal Values: Valid IPv6 Address

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.IPv6Static.PrefixLength (Read or Write)

Description: Prefix length for the iDRAC IPv6 Address.

Legal Values: Integral values: 1–128
**Default Value**: 64

**Write Privilege**: Configure iDRAC

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: None

### iDRAC.IPv6URL

Use the objects in this group to manage the IPv6 static configuration properties of iDRAC.

**iDRAC.IPv6URL.URL (Read Only)**

**Description**: iDRAC IPv6 URL String of format 'https://[ipv6 address]:<port number>'

**Legal Values**: IPv6 URL String

**Default Value**: Not Applicable

**Write Privilege**: Not Applicable

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: iDRAC IPv6 has to be Enabled

### iDRAC.LDAP

To configure properties for LDAP settings, use the objects in this group.

**iDRAC.LDAP.BaseDN (Read or Write)**

**Description**: The Domain Name of the branch of the directory where all searches must start.

**Legal Values**: String of up to 63 ASCII characters

**Default Value**: Not Applicable

**Write Privilege**: Configure iDRAC

**License Required**: iDRAC Enterprise

**Dependency**: None
**iDRAC.LDAP.BindDN (Read or Write)**

**Description**  
The domain name of the branch of the directory where all searches must start.

**Legal Values**  
String of up to 255 ASCII characters

**Default Value**  
Not Applicable

**Write Privilege**  
Configure iDRAC

**License Required**  
iDRAC Enterprise

**Dependency**  
None

**iDRAC.LDAP.BindPassword (Write Only)**

**Description**  
A bind password to use along with the bindDN.

**Legal Values**  
String of up to 254 ASCII characters

**Default Value**  
Not Applicable

**Write Privilege**  
Configure iDRAC

**License Required**  
iDRAC Enterprise

**Dependency**  
None

**iDRAC.LDAP.CertValidationEnable (Read or Write)**

**Description**  
Controls certificate validation during SSL handshake.

**Legal Values**  
- 0 — Disabled
- 1 — Enabled

**Default Value**  
1 — Enabled

**Write Privilege**  
Configure iDRAC

**License Required**  
iDRAC Enterprise

**Dependency**  
None
iDRAC.LDAP.Enable (Read or Write)

Description: Turns LDAP service on or off.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: iDRAC Enterprise

Dependency: None

iDRAC.LDAP.GroupAttribute (Read or Write)

Description: Specifies which LDAP attribute is used to check for group membership.

Legal Values: String of up to 128 ASCII characters

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: iDRAC Enterprise

Dependency: None

iDRAC.LDAP.GroupAttributeIsDN (Read or Write)

Description: Specifies whether the user domain name must be used from the LDAP server or from the user that provides login.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: 1 — Enabled

Write Privilege: Configure iDRAC

License Required: iDRAC Enterprise

Dependency: None
### iDRAC.LDAP.Port (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Port of LDAP over SSL.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>Integer values: 1–65535</td>
</tr>
<tr>
<td>Default Value</td>
<td>636</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Configure iDRAC</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

### iDRAC.LDAP.SearchFilter (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>A valid LDAP search filter to be used if the user attribute cannot uniquely identify the login user within the chosen baseDN.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>String of up to 254 ASCII characters</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Configure iDRAC</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

### iDRAC.LDAP.Server (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Configures the address of the LDAP Server.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>String of up to 254 ASCII characters</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Configure iDRAC</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>
iDRAC.LDAP.UserAttribute (Read or Write)

Description: To search, specify the user attribute.
Legal Values: String of up to 128 ASCII characters
Default Value: Not Applicable
Write Privilege: Configure iDRAC
License Required: iDRAC Enterprise
Dependency: None

iDRAC.LDAPRoleGroup

The objects in this group enable configuration of role groups for LDAP. This group is indexed from 1 to 5.

iDRAC.LDAPRoleGroup.DN (Read or Write)

Description: The Domain Name of this group.
Legal Values: String of up to 1024 ASCII characters
Default Value: Not Applicable
Write Privilege: Configure iDRAC
License Required: iDRAC Enterprise
Dependency: None

iDRAC.LDAPRoleGroup.Privilege (Read or Write)

Description: A bit-mask defining the privileges associated with this particular group.
Legal Values: Integral values: 0–511 (0x1FF)
Default Value: 0
Write Privilege: Configure iDRAC
License Required: iDRAC Enterprise
Dependency: None
# iDRAC.LocalSecurity

To manage the ability to configure iDRAC, use the objects in this group.

## iDRAC.LocalSecurity.LocalConfigDisabled (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>To configure iDRAC from Local RACADM, enable or disable the ability of the local user.</th>
</tr>
</thead>
</table>
| Legal Values| - 0 — Disabled
|             | - 1 — Enabled
| Default Value| 0 — Disabled |
| Write Privilege | Configure iDRAC |
| License Required | iDRAC Express or iDRAC Enterprise |
| Dependency | None |

## iDRAC.LocalSecurity.PrebootConfig (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>To configure iDRAC from the BIOS POST option-ROM, enable or disable the ability of the local user.</th>
</tr>
</thead>
</table>
| Legal Values| - 0 — Disabled
|             | - 1 — Enabled
| Default Value| 0 — Disabled |
| Write Privilege | Configure iDRAC |
| License Required | iDRAC Express or iDRAC Enterprise |
| Dependency | None |

## iDRAC.Logging

iDRAC. Logging Manages the ability to configure iDRAC

## iDRAC.Logging.SELOEMEventFilterEnable (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Enables or disables the ability of Logging SEL Records with OEM.</th>
</tr>
</thead>
</table>
| Legal Values| - 0 — Disabled
|             | - 1 — Enabled |
Default Value: 0 — Disabled
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

iDRAC.NIC

To configure the iDRAC NIC, use the object in this group.

**NOTE:** The following objects are not valid for the modular systems:
- Auto negotiation
- Auto dedicated NIC
- Network speed
- Duplex
- Dedicated NIC scan time
- Shared NIC scan time

iDRAC.NIC.Autoconfig (Read or Write)

**Description**
Sets the DHCP auto configuration operation.

**Legal Values**
- 0 — Disabled

  **NOTE:**
  iDRAC does not perform DHCP configuration.

- 1 — Enable Once

  **NOTE:**
  iDRAC performs DHCP configuration once.

- 2 — Enable Once After Reset

  **NOTE:**
  Configures after iDRAC reset.

Default Values: 0 — Disabled
Write Privilege: Configure iDRAC
License Required: iDRAC Enterprise
Dependency: None

iDRAC.NIC.AutoDetect (Read or Write)

**Description**
Enables or disables auto detection feature of iDRAC.

**Legal Values**
- 0 — Disabled
iDRAC.NIC.Autoneg (Read or Write)

Description
Enables auto-negotiation of physical link speed and duplex.

Legal Values
- 0 — Disabled
- 1 — Enabled

Default Value
1 — Enabled

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

iDRAC.NIC.DedicatedNICScanTime (Read or Write)

Description
Wait time for the iDRAC to switch from dedicated mode to shared mode.

Legal Values
Integral values: 5–255

Default Value
5

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

iDRAC.NIC.DNSDomainFromDHCP (Read or Write)

Description
Specifies that the iDRAC DNS domain name must be assigned from the network DHCP server.

Legal Values
- 0 — Disabled
- 1 — Enabled
<table>
<thead>
<tr>
<th><strong>Default Value</strong></th>
<th>0 — Disabled</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Write Privilege</strong></td>
<td>Configure iDRAC</td>
</tr>
<tr>
<td><strong>License Required</strong></td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td><strong>Dependency</strong></td>
<td>Can be Enabled only if the following are enabled:</td>
</tr>
<tr>
<td></td>
<td>• IPv4.Enable and IPv4.DHCPEnable</td>
</tr>
<tr>
<td></td>
<td>• IPv6.Enable and IPv6.AutoConfig</td>
</tr>
</tbody>
</table>

### iDRAC.NIC.DNSDomainName (Read or Write)

**Description**
The DNS Domain Name.

**Legal Values**
A string of up to 254 ASCII characters

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Can be set only if NIC.DNSDomainFromDHCP is disabled.

### iDRAC.NIC.DNSDomainNameFromDHCP (Read or Write)

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

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
0 — Disabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### iDRAC.NIC.DNSRacName (Read or Write)

**Description**
The iDRAC name.

**Legal Values**
String of up to 63 ASCII characters

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC
License Required: IDRAC Express or IDRAC Enterprise

Dependency: None

**iDRAC.NIC.DNSRegister (Read or Write)**

**Description:** Registers the iDRAC name with the DNS server.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default value:**
0 — Disabled

**Write Privilege:** Configure IDRAC

**License Required:** IDRAC Express or IDRAC Enterprise

**Dependency:** Can be Enabled only if DNSRacName is set.

**iDRAC.NIC.Duplex (Read or Write)**

**Description:** Specifies the duplex setting for the iDRAC NIC.

**Legal Values**
- 0 — Half
- 1 — Full

**Default value:**
1 — Full

**Write Privilege:** Configure IDRAC

**License Required:** IDRAC Express or IDRAC Enterprise

**Dependency:** None

**iDRAC.NIC.Enable (Read or Write)**

**Description:** Enables or Disables the iDRAC network interface controller.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value:**
1 — Enabled

**Write Privilege:** Configure IDRAC

**License Required:** IDRAC Express or IDRAC Enterprise
iDRAC.NIC.Failover (Read or Write)

**Description**
Enables or disables failover for iDRAC to switch from shared to dedicated.

**Legal Values**
- 0 — None
- 2 — LOM1
- 3 — LOM2
- 4 — LOM3
- 5 — LOM4
- 6 — All

**Default Value**
0 — None

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Possible Values depend on current NICSelection settings.

iDRAC.NIC.MACAddress (Read or Write)

**Description**
The MAC Address of the iDRAC.

**Legal Values**
String of up to 17 ASCII characters

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

iDRAC.NIC.MTU (Read or Write)

**Description**
The size in bytes of the maximum transmission unit uses the iDRAC NIC.

**Legal Values**
Integral values: 576–1500

**Default Value**
1500

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise


## iDRAC.NIC.Selection (Read or Write)

**Description**
Specifies the current mode of operation for the iDRAC network interface controller.

**Legal Values**
- 1 — Dedicated
- 2 — LOM1
- 3 — LOM2
- 4 — LOM3
- 5 — LOM4

**Default Value**
1 — Dedicated

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**NOTE:** Values for the platforms with single LOM port are, 1 — Dedicated and 2 — LOM1.

## iDRAC.NIC.SharedNICSscanTime (Read or Write)

**Description**
Wait time for the iDRAC to switch from shared mode to dedicated mode.

**Legal Values**
Integral values: 5–255

**Default Value**
30

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

## iDRAC.NIC.Speed (Read or Write)

**Description**
Specifies the speed for iDRAC NIC.
NOTE: To set this property:

- iDRAC.NIC.Selection must be set to Dedicated mode.
- iDRAC.NIC.Autoneg must be disabled.

Legal Values

1. 0 — 10
2. 1 — 100
3. 2 — 1000

NOTE: You cannot manually set the Network Speed to 1000 MB. This option is available only if iDRAC.NIC.Autoneg is set to 1 (Enabled).

Default Value 1 — 100
Write Privilege Configure iDRAC
License Required iDRAC Express or iDRAC Enterprise
Dependency Cannot change NIC Speed unless AutoNeg is set to disabled.

iDRAC.NIC.VLanEnable (Read Only)

Description Enables or disables the VLAN capabilities of the iDRAC.

NOTE: This object is applicable only to iDRAC on Racks and Towers.

Legal Values

1. 0 — Disabled
2. 1 — Enabled

Default Value 0 — Disabled
Write Privilege Configure iDRAC
License Required iDRAC Express or iDRAC Enterprise
Dependency None

iDRAC.NIC.VLanID (Read Only)

Description Specifies the VLAN ID for the network VLAN configuration.

NOTE: This object is applicable only to iDRAC on Racks and Towers.

Legal Values Integral values: 1–4069
Default Value 1
Write Privilege Configure iDRAC
License Required: IDRAC Express or IDRAC Enterprise

Dependency: None

**iDRAC.NIC.VLanPort (Read or Write)**

- **Description**: Enables or disables the VLAN switch of the iDRAC.
- **Legal Values**:
  - 1 — Dedicated ports only
  - 2 — LOM ports only
  - 0 — Both the ports
- **Default Value**: 0 — Both
- **Write Privilege**: Configure iDRAC
- **License Required**: RACADM
- **Dependency**: None

**iDRAC.NIC.VLanPriority (Read Only)**

- **Description**: Specifies the VLAN priority for the network VLAN configuration.

  **NOTE**: This object is applicable only to iDRAC on Racks and Towers.
- **Legal Values**: Integral values: 0–7
- **Default Value**: 0
- **Write Privilege**: Configure iDRAC
- **License Required**: IDRAC Express or IDRAC Enterprise
- **Dependency**: None

**iDRAC.NICStatic**

To manage DNS-related properties of iDRAC, use the objects in this group.

**iDRAC.NICStatic.DNSDomainFromDHCP (Read or Write)**

- **Description**: Specifies that the iDRAC DNS domain name must be assigned from the network DHCP server.
- **Legal Values**: String of up to 254 ASCII characters
- **Default Value**: Disabled
iDRAC.NICStatic.DNSDomainName (Read or Write)

**Description**
The DNS Domain Name.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

iDRAC.NTPConfigGroup

To configure the properties of NTP server, use the objects in this group.

iDRAC.NTPConfigGroup.NTP1 (Read or Write)

**Description**
Configure NTP Server 1 Address.

**Legal Values**
String of up to 254 ASCII characters

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

iDRAC.NTPConfigGroup.NTP2 (Read or Write)

**Description**
Configure NTP Server 2 Address.

**Legal Values**
String of up to 254 ASCII characters

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC
License Required: IDRAC Express or IDRAC Enterprise

Dependency: None

iDRAC.NTPConfigGroup.NTP3 (Read or Write)

Description: Configure NTP Server 3 Address.

Legal Values: String of up to 254 ASCII characters.

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: IDRAC Express or IDRAC Enterprise

Dependency: None

iDRAC.NTPConfigGroup.NTPEnable (Read or Write)

Description: On iDRAC, enable or disable NTP server access to iDRAC.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: 0 — Disabled

Write Privilege: Configure iDRAC

License Required: IDRAC Express or IDRAC Enterprise

Dependency: None

iDRAC.NTPConfigGroup.NTPMaxDist (Read or Write)

Description: NTP Maximum Distance

Legal Values: Integral values: 1–128

Default Value: 16

Write Privilege: Configure iDRAC

License Required: IDRAC Express or IDRAC Enterprise

Dependency: None
iDRAC.OS-BMC

To manage OS-BMC pass-through feature, use the object in this group.

iDRAC.OS-BMC.AdminState (Read or Write)

Description: On iDRAC pass through, enable or disable administrative state of OS.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: 0 — Disabled

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Can be set only if iDRAC.OS-BMC.PTCapability is set to Capable.

iDRAC.OS-BMC.OSIpAddress (Read or Write)

Description: IPv4 address of the host Operating System.

Legal Values: Valid IPv4 Address

Default Value: 0.0.0.0

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.OS-BMC.PTCapability (Read or Write)

Description: Operating System to iDRAC Pass Through Capability status.

Legal Values:
- 0 — Capable
- 1 — Not Capable or Unknown

Default Value: Depends on the server capability.

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise
### iDRAC.OS-BMC.PTMode (Read or Write)

**Description**
Enables the pass-through with shared LOM or USB.

**NOTE:** To enable the pass-through, make sure that iDRAC.OS-BMC.AdminState is enabled.

**Legal Values**
- 0 — Iom-p2p
- 1 — usb-p2p

**Default Value**
0 — Iom-p2p

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### iDRAC.OS-BMC.UsbNicIpAddress (Read or Write)

**Description**
Displays the USB NIC IP address.

**Legal Values**
Valid IPv4 address

**Default Value**
169.168.0

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### iDRAC.Racadm

To manage Remote RACADM connection settings, use the object in this group.

### iDRAC.Racadm.Enable (Read or Write)

**Description**
Enables or disables Remote RACADM interface.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
Enabled

**Write Privilege**
Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

**iDRAC.Racadm.Timeout (Read or Write)**

**Description:** Defines the idle timeout in seconds of the Remote RACADM interface.

**Legal Values:**
- 0 — No timeout
- Integral values: 60–10800

**Default Value:** 60

**Write Privilege:** Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

**iDRAC.Redfish**

The objects in this group provide configuration parameters for the Redfish interface to iDRAC.

**iDRAC.Redfish.Enable (Read or Write)**

**Description:** Enables or disables Redfish service on iDRAC.

**Legal Values:**
- 0 — Disabled
- 1 — Enabled

**Default Value:** 1 — Enabled

**Write Privilege:** Configure iDRAC

License Required: RACADM
Dependency: None

**iDRAC.Redfisheventing**

The objects in this group provide information on Redfish events.
**iDRAC.Redfisheventing.DeliveryRetryAttempts (Read or Write)**

**Description**
Specifies the number of retry attempts made for Redfish event delivery.

**Legal Values**
Value ranges from 0 to 5.

**Default Value**
3

**Write Privilege**
Configure iDRAC

**License Required**
RACADM

**Dependency**
None

**iDRAC.Redfisheventing.DeliveryRetryIntervalInSeconds (Read or Write)**

**Description**
Specifies the intervals (in seconds) of retry attempts made for Redfish event delivery.

**Legal Values**
Value ranges from 5 to 60.

**Default Value**
30

**Write Privilege**
Configure iDRAC

**License Required**
RACADM

**Dependency**
None

**iDRAC.Redfisheventing.IgnoreCertificateErrors (Read Only)**

**Description**
Enables or disables Ignorance of Certificate Errors notifications.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
0 — Disabled

**Write Privilege**
Configure iDRAC

**License Required**
None

**Dependency**
None
iDRAC.RemoteHosts

Use the objects in this group to manage the properties for configuration of the SMTP server.

iDRAC.RemoteHost.SMTPPort (Read or Write)

Description: Specifies the destination port for email alerts.
Legal Values: Integral values: 1–65535
Default Value: 25
Write Privilege: Configure iDRAC
License Required: iDRAC Express
Dependency: None

iDRAC.RemoteHosts.SMTPServerIPAddress (Read or Write)

Description: IPv4 or IPv6 address of the network SMTP server.
Legal Values: String representing a valid SMTP server IPv4 or IPv6 address
Default Value: 0.0.0.0
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

iDRAC.RFS

To configure Remote file share access to iDRAC, use the object in this group

iDRAC.RFS.MediaAttachState (Read Only)

Description: RFS Media attach state.
Legal Values:

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Attached</td>
</tr>
<tr>
<td>1</td>
<td>Detached</td>
</tr>
</tbody>
</table>

Default Value: 1 — Detached
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
iDRAC.RSM

The objects in this group manage the Rack Style Management (RSM) settings.

iDRAC.RSM.RSMCapability (Read Only)

Description: Specifies the status of RSM capability.
Legal Values:
- 0 — Disabled
- 1 — Enabled
Default Value: 0 — Disabled
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

iDRAC.RSM.RSMSetting (Read Only)

Description: Specifies the status of RSM setting.
Legal Values:
- 0 — None
- 1 — Monitor
- 2 — Manage and Monitor
Default Value: 2 — Manage and Monitor
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

iDRAC.Security

Use the objects in this group to configure SSL certificate signing request settings.

For the country code, see [http://www.iso.org/iso/home/standards/country_codes.htm](http://www.iso.org/iso/home/standards/country_codes.htm).

iDRAC.Security.CsrCommonName (Read or Write)

Description: Specifies the CSR Common Name (CN) that must be an IP as given in the certificate.
Legal Values: String of up to 254 ASCII characters
Default Value: Not Applicable
Write Privilege: Configure iDRAC
iDRAC.Security.CsrCountryCode (Read or Write)

Description
Specifies the CSR Country Code (CC).

Legal Values
String of a 2 Alphabet Country Code. For example: US

Default Value
Not Applicable

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

iDRAC.Security.CsrEmailAddr (Read or Write)

Description
Specifies the CSR email address.

Legal Values
Valid email address string of up to 254 ASCII characters.

Default Value
Not Applicable

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

iDRAC.Security.CsrKeySize (Read or Write)

Description
Specifies the SSL asymmetric key size for the CSRs.

Legal Values
- 1024
- 2048

Default Value
2048

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None
iDRAC.Security.CsrLocalityName (Read or Write)

Description  Specifies the CSR Locality (L).
Legal Values  String of up to 254 ASCII characters
Default Value  Not Applicable
Write Privilege  Configure iDRAC
License Required  iDRAC Express or iDRAC Enterprise
Dependency  None

iDRAC.Security.CsrOrganizationName (Read or Write)

Description  Specifies the CSR Organization Name (O).
Legal Values  String of up to 254 ASCII characters
Default Value  Not Applicable
Write Privilege  Configure iDRAC
License Required  iDRAC Express or iDRAC Enterprise
Dependency  None

iDRAC.Security.CsrOrganizationUnit (Read or Write)

Description  Specifies the CSR Organization Unit (OU).
Legal Values  String of up to 254 ASCII characters
Default Value  Not Applicable
Write Privilege  Configure iDRAC
License Required  iDRAC Express or iDRAC Enterprise
Dependency  None

iDRAC.Security.CsrStateName (Read or Write)

Description  Specifies the CSR State Name (S).
Legal Values  String of up to 254 ASCII characters
iDRAC.Security.FIPSMode (Read or Write)

Description: Enables or disables the FIPS mode compliance. Enabling FIPS mode resets iDRAC configuration to factory defaults.

Legal Values:  
- 1 - Enabled
- 0 - Disabled

Default Value: 0 - Disabled

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

**NOTE:** Setting FIPSMode to 0 - Disabled, will not have any effect.

**NOTE:** To disable FIPSmode, reset the iDRAC to factory default setting (racadm racresetcfg).

**NOTE:** If FIPS is enabled, you cannot perform any actions associated with the vFlash SD card, such as configuring the vFlash SD card, exporting or backing up server profile to the vFlash, or importing server profile using vFlash.

iDRAC.Serial

The objects in this group provide configuration parameters for the serial interface of iDRAC.

**NOTE:** This is supported only for rack and tower systems.

iDRAC.Serial.BaudRate (Read or Write)

Description: Sets the Baud rate on the iDRAC serial port.

Legal Values:  
- 9600
- 19200
- 57600
- 115200

Default Value: 115200

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise
iDRAC.Serial.Command (Read or Write)

Description: Specifies a serial command that is executed after the user logs in to the serial console interface.

Legal Values: String of up to 128 ASCII characters

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.Serial.Enable (Read or Write)

Description: Enables or disables the iDRAC serial console interface.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: 0 — Disabled

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.Serial.HistorySize (Read or Write)

Description: Specifies the maximum size of the serial history buffer.

Legal Values: Integral values from 0 to 8192.

Default Value: 8192

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None
iDRAC.Serial.IdleTimeout (Read or Write)

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

**Legal Values**
- 0 — No timeout
- Integral values: 60–10800

**Default Value**
300

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

iDRAC.Serial.NoAuth (Read or Write)

**Description**
Enables or disables iDRAC serial console login authentication.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
Disabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

iDRAC.SerialRedirection

The objects in this group manage Serial Redirection properties of iDRAC.

**NOTE:** It supports only rack and tower systems.

iDRAC.SerialRedirection.Enable (Read or Write)

**Description**
Enables or disables the console for COM2 port redirection.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
1 — Enabled

**Write Privilege**
Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

**iDRAC.SerialRedirection.QuitKey (Read or Write)**

**Description**: This key or key combination terminates the Virtual Console when using the console COM2 command.

**Legal Values**: Ctrl key followed by alphabets (a-z or A-Z). ^\$

**Default Value**: ^\$

**Write Privilege**: Configure iDRAC

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: None

**iDRAC.serverboot**

The objects in this group manages the server boot options.

**iDRAC.serverboot.BootOnce (Read or Write)**

**Description**: Enables or disables BootOnce option for the configured device.

**Legal Values**:
- 0 — Disabled
- 1 — Enabled

**Default values**: 1 — Enabled

**Write Privilege**: Login and configure iDRAC

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: Read only if iDRAC.ServerBoot.FirstBootDevice is set to either BIOS (BIOS Setup), F10 (Lifecycle Controller), or F11 (BIOS Boot Manager).

**iDRAC.serverboot.FirstBootDevice (Read or Write)**

**Description**: Configures the first boot device.

**Legal Values**:
- Normal
- PXE
- HDD (Hard Disk Drive)
- CD-DVD (Local CD/DVD)
- BIOS (BIOS Setup)
- vFDD (Virtual Floppy)
- VCD-DVD (Virtual CD/DVD/ISO)
- FDD (Local Floppy/Primary Removable Media)
• SD (Local SD Card)
• F10 (Lifecycle Controller)
• F11 (BIOS Boot Manager)
• Attached vFlash Partition Label

Default value: Normal

Write Privilege: Login and configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.ServiceModule

The objects in this group manages the properties of the ISM modules.

iDRAC.ServiceModule.iDRACHardReset (Read or Write)

Description: Resets iDRAC when it is unresponsive.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: 1 — Enabled

Write Privilege: Configure iDRAC

License Required: RACADM

Dependency: iDRAC.ServiceModule.ServiceModuleEnable attribute must be enabled.

iDRAC.ServiceModule.LCLReplication (Read or Write)

Description: Enables Lifecycle log in operating system log Baud rate on the iDRAC serial port.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default Value: 0 — Disabled

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: If OpenManage Server Administrator is available, then the attribute is automatically set to ‘Disabled’.
iDRAC.ServiceModule.OMSAPresence (Read Only)

Description
Verifies if OMSA is present.

Legal Values
- 0 — Not Present
- 1 — Present
- 2 — NA

Default Value
2 — NA

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

iDRAC.ServiceModule.OSInfo (Read or Write)

Description
Provides information about operating system through iDRAC Service Module.

Legal Values
- 0 — Disabled
- 1 — Enabled

Default Value
1 — Enabled

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

iDRAC.ServiceModule.ServiceModuleEnable (Read or Write)

Description
Disables the Service Module process on host operating system.

Legal Values
- 0 — Disabled
- 1 — Enabled

Default Value
1 — Enabled

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

iDRAC.ServiceModule.ServiceModuleState (Read or Write)

Description
Indicates the status of Service Module process on the host operating system.

Legal Values
- 0 — Disabled
- 1 — Enabled
### iDRAC.ServiceModule.ServiceModuleVersion (Read)

**Description**
Displays the installed version of iDRAC Service Module.

**Legal Values**
None

**Default Value**
None

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### iDRAC.ServiceModule.WatchdogRecoveryAction (Read and Write)

**Description**
Configures recovery action on watchdog alert.

**Legal Values**
- 0 — None
- 1 — Reboot
- 2 — Poweroff
- 3 — Powercycle

**Default Value**
0 — None

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
If the iDRAC.ServiceModule.WatchdogState object is 'Disabled', then the value cannot be set.

### iDRAC.ServiceModule.WatchdogResetTime (Read and Write)

**Description**
Configures the system reset time (unit in seconds) on watchdog alert.

**Legal Values**
Values in range 60–720

**Default Value**
480

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
If the iDRAC.ServiceModule.WatchdogState object is 'Disabled', then the value cannot be set.
iDRAC.ServiceModule.WatchdogState (Read and Write)

**Description**
Enables or disables the watchdog timer through iDRAC Service Module.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
0 — Disabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
The value is disabled if OpenManage Server Administrator is detected or operating system Watchdog is enabled.

iDRAC.SmartCard

The objects in this group enable you to access iDRAC using a smart card.

iDRAC.SmartCard.SmartCardCRLEnable (Read or Write)

**Description**
Enables or disables the Certificate Revocation List (CRL).

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Enterprise

**Dependency**
To log on, enable Smart Card.

iDRAC.SmartCard.SmartCardLogonEnable (Read or Write)

**Description**
Enables or disables Smart card login support.

**Legal Values**
- 0 — Disabled
- 1 — Enabled
- 2 — Enabled with Remote RACADM

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC and Configure User

**License Required**
iDRAC Enterprise

**Dependency**
Disable ActiveDirectory.SSOEnable
**iDRAC.SNMP**

The objects in this group enable you to configure the SNMP agent and trap capabilities.

### iDRAC.SNMP.AgentCommunity (Read or Write)

**Description**
Specifies the SNMP community name to be used for SNMP Agent

**Legal Values**
String of up to 31 ACSII characters

**Default value**
Public

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### iDRAC.SNMP.AgentEnable (Read or Write)

**Description**
Enables or disables the SNMP Agent on the iDRAC.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
1 — Enabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### iDRAC.SNMP.AlertPort (Read or Write)

**Description**
Specifies the SNMP alert port for traps.

**Legal Values**
Integral values: 1–65535

**Default Value**
162

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express

**Dependency**
None
iDRAC.SNMP.DiscoveryPort (Read or Write)

Description: Specifies the SNMP agent port on iDRAC.

Legal Values: Integral values: 1–65535

Default Value: 161

Write Privilege: Configure iDRAC

License Required: iDRAC Express

Dependency: None

iDRAC.SNMP.SNMPProtocol (Read or Write)

Description: Specifies the SNMP protocol.

Legal Values:
- 0 — All
- 1 — SNMPv3

Default Value: 0 — All

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.SNMP.TrapFormat (Read or Write)

Description: Specifies the SNMP format.

Legal Values:
- 0 — SNMPv1
- 1 — SNMPv2c
- 2 — SNMPv3

Default Value: 0 — SNMPv1

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

iDRAC.SNMP.Alert

The objects in this group configure the SNMP alert settings.
This group is indexed from 1 to 8.

iDRAC.SNMP.Alert.DestAddr (Read or Write)

Description
IPv4, IPv6 or FQDN address of the target destination to receive alters.

Legal Values
Valid IPv4 or IPv6 or FQDN address

Default Value
- Index 1–4 — 0.0.0.0
- Index 5–8 — ::

Write Privilege
Configure iDRAC

License Required
None

Dependency
None

iDRAC.SNMP.Alert.Enable (Read or Write)

Description
Enables or disables SNMP alert for the given index.

Legal Values
- 0 — Disabled
- 1 — Enabled

Default Value
Not Applicable

Write Privilege
Configure iDRAC

License Required
None

Dependency
None

iDRAC.SNMP.Alert.SNMPv3UserID (Read Only)

Description
Indicates the index of the user to which this alert is configured.

Legal Values
Integral values: 2–16

Default Value
Not Applicable

Write Privilege
Configure iDRAC

License Required
iDRAC Express

Dependency
None
iDRAC.SNMP.Alert.SNMPv3Username (Read or Write)

**Description**
Specifies the SNMP v3 user name for the given index.

**Legal Values**
String of up to 16 ASCII characters

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express

**Dependency**
None

iDRAC.SSH

The objects in this group provide configuration parameters for the SSH interface to iDRAC.

iDRAC.SSH.Enable (Read or Write)

**Description**
Enables or disables SSH.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
1 — Enabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

iDRAC.SSH.Port (Read or Write)

**Description**
Specifies the port number for the iDRAC SSH interface.

**Legal Values**
Integral values: 1–65535

**Default Value**
22

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
iDRAC.SSH.Timeout (Read or Write)

Description: Defines the secure shell idle timeout.
Legal Values: Integral values: 0–10800
Default Value: 1800
Write Privilege: Configure iDRAC
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

iDRAC.SysLog

The objects in this group provide the properties for configuration of the SMTP server.

iDRAC.SysLog.Port (Read or Write)

Description: Remote syslog port number.
Legal Values: Integral values: 1–65535
Default Value: 514
Write Privilege: Configure iDRAC
License Required: iDRAC Enterprise
Dependency: None

iDRAC.SysLog.PowerLogEnable (Read or Write)

Description: Enables or disables the Power Log feature.
Legal Values: 0 — Disabled
  1 — Enabled
Default Value: 0 — Disabled
Write Privilege: Configure iDRAC
License Required: iDRAC Enterprise
Dependency: None
iDRAC.SysLog.PowerLogInterval (Read or Write)

Description: Configure time delay for power logging.
Legal Values: Integral values: 1–1440
Default Value: 5
Write Privilege: Configure iDRAC
License Required: iDRAC Enterprise
Dependency: None

iDRAC.SysLog.Server1 (Read or Write)

Description: Name of remote syslog server 1.
Legal Values: String of up to 63 ASCII characters
Default Value: Not Applicable
Write Privilege: Configure iDRAC
License Required: iDRAC Enterprise
Dependency: None

iDRAC.SysLog.Server2 (Read or Write)

Description: Name of remote syslog server 2.
Legal Values: String of up to 63 ASCII characters
Default Value: Not Applicable
Write Privilege: Configure iDRAC
License Required: iDRAC Enterprise
Dependency: None
iDRAC.SysLog.Server3 (Read or Write)

Description
Name of remote syslog server 3.

Legal Values
String of up to 63 ASCII characters

Default Value
Not Applicable

Write Privilege
Configure iDRAC

License Required
iDRAC Enterprise

Dependency
None

iDRAC.SysLog.SysLogEnable (Read or Write)

Description
Enables or disables remote syslog.

Legal Values
• 0 — Disabled
• 1 — Enabled

Default Value
Not Applicable

Write Privilege
Configure iDRAC

License Required
iDRAC Enterprise

Dependency
None

iDRAC.Telnet

The objects in this group provide configuration parameters for the Telnet interface to iDRAC.

iDRAC.Telnet.Enable (Read or Write)

Description
Enables or disables Telnet.

Legal Values
• 0 — Disabled
• 1 — Enabled

Default Value
0 — Disabled

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None
iDRAC.Telnet.Port (Read or Write)

**Description**
Specifies the port number for the iDRAC Telnet interface.

**Legal Values**
Integral values: 1–65535

**Default Value**
23

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

iDRAC.Telnet.Timeout (Read or Write)

**Description**
Defines the Telnet idle timeout.

**Legal Values**
Integral values: 0–10800

**Default Value**
1800

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

iDRAC.Time

The objects in this group enable you to manage time zone setting for iDRAC.

iDRAC.Time.DayLightOffset (Read or Write)

**Description**
Specifies the daylight savings offset (in minutes) to use for the iDRAC Time.

**Legal Values**
Integral values: 0 – 60

**Default Value**
0

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
iDRAC.Time.Timezone (Read or Write)

Description
Configure the time zone.

Legal Values
Valid time zone string of up to 32 ASCII characters For example: US/Central

Default Value
CST6CDT

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

iDRAC.Time.TimeZoneOffset (Read or Write)

Description
Specifies the time zone offset (in minutes) from Greenwich Mean Time (GMT) or Coordinated Universal Time (UTC) to use for the iDRAC Time.

Legal Values
Integral values: -43200 – 46800

Default Value
0

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

iDRAC.Tuning

The objects in this group enable you to manage iDRAC tuning and configuration parameters.

iDRAC.Tuning.DefaultCredentialWarning (Read or Write)

Description
Enables or disables the default credentials warning.

Legal Values
- 0 — Disabled
- 1 — Enabled

Default Value
1 — Enabled

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None
iDRAC.Update

The objects in this group enable you to manage configuration parameters for iDRAC firmware update.

**NOTE:** `fwUpdateIPAddr` attribute is applicable for Monolithic & FX2/FX2s only.

### iDRAC.Update.FwUpdateIPAddr (Read or Write)

**Description**
Specifies the TFTP server address to be used for iDRAC firmware update operations.

**Legal Values**
Valid IPv4, IPv6, or FQDN address of the TFTP server

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### iDRAC.Update.FwUpdatePath (Read or Write)

**Description**
Specifies TFTP path where iDRAC firmware image resides on TFTP server. Path is relative to TFTP root folder.

**Legal Values**
String of up to 255 ACSII characters. For example: `/images/12G/`

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### iDRAC.Update.FwUpdateTFTPEnable (Read or Write)

**Description**
Enables or disables iDRAC firmware updates from a TFTP server.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
1 — Enabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise
### iDRAC.USB

The objects in this group manages the front panel USB.

#### iDRAC.USB.ConfigurationXML (Read or Write)

- **Description**: Manages the configuration xml feature using the front panel USB.
- **Legal Values**:
  - Disabled
  - Enabled while server has default credential settings only
  - Enabled
- **Default Value**: Enabled while server has default credential settings only.
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express and iDRAC Enterprise
- **Dependency**: Not Applicable

#### iDRAC.USB.ManagementPortMode (Read Only)

- **Description**: Displays the front panel USB mode.
- **Legal Values**:
  - Automatic
  - Standard OS Use
  - iDRAC Direct Only
- **Default Value**: Automatic
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express and iDRAC Enterprise
- **Dependency**: Not Applicable

### iDRAC.UserDomain

The objects in this group enable you to manage the Active Directory user domain names. This group is indexed from 1 to 40.

#### iDRAC.UserDomain.Name (Read or Write)

- **Description**: Specifies the Active Directory user domain name for a given index.
- **Legal Values**: String of up to 255 ACSII characters
- **Default Value**: Not Applicable
iDRAC.Users

The objects in this group enable you to manage information about all iDRAC users. This group is indexed from 1 to 16.

iDRAC.Users.Enable (Read or Write)

Description
Enables or disables an individual user.

Legal Values
- 0 — Disabled
- 1 — Enabled

Default Value
0 — Disabled. However, Root user is Enabled.

Write Privilege Configure iDRAC

License Required iDRAC Express or iDRAC Enterprise

Dependency Both username and password must be configured prior to enabling the user.

iDRAC.Users.IpmiLanPrivilege (Read or Write)

Description
Specifies the maximum privilege on the IPMI LAN channel.

Legal Values
Integral values:
- 2 — User
- 3 — Operator
- 4 — Administrator
- 15 — No access

Default Value
15 — No access

Write Privilege Configure iDRAC

License Required iDRAC Express or iDRAC Enterprise

Dependency Both username and password must be configured prior to setting this object.
iDRAC.Users.IpmiSerialPrivilege (Read or Write)

Description: Specifies the maximum IPMI Serial privilege.

Legal Values: Integral values:
- 2 — User
- 3 — Operator
- 4 — Administrator
- 15 — No access

Default Value: 15 — No access

Write Privilege: Configure iDRAC and user

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Both username and password must be configured prior to setting this object.

iDRAC.Users.MD5v3Key (Read or Write)

Description: Indicates the MD5 Hash of the SNMP V3 key.

Legal Values: String of 32 characters

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: iDRAC Express

Dependency: User name must be configured prior to setting MD5v3Key.

iDRAC.Users.Password (Read or Write)

Description: Configuring the iDRAC user password.

Legal Values: String of up to 20 characters

Default Value: Not Applicable

Write Privilege: Configure iDRAC

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Cannot be set without first setting the user name.
### iDRAC.Users.SHA256Password (Read or Write)

- **Description**: Indicates the SHA256 hash of the password.
- **Legal Values**: String of 64 characters
- **Default Value**: Not Applicable
- **Write Privilege**: Configure iDRAC and Configure User
- **License Required**: iDRAC Express
- **Dependency**: User name must be configured prior to setting this object.

### iDRAC.Users.SHA256PasswordSalt (Read or Write)

- **Description**: Indicates the Salt string added to password before hash.
- **Legal Values**: String of 32 characters
- **Write Privilege**: Configure iDRAC and Configure User
- **License Required**: iDRAC Express
- **Dependency**: User name must be configured prior to setting this object.

### iDRAC.Users.Privilege (Read or Write)

- **Description**: Specifies the role-based authority privileges allowed for the user.
- **Legal Values**: Integral values: 0–511 (0x1FF)
- **Default Value**: 0
- **Write Privilege**: Configure iDRAC and Configure User
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Both user name and password must be configured prior to setting this object.

### iDRAC.Users.SHA1v3Key (Read or Write)

- **Description**: Indicates the SHA1 Hash of the SNMP V3 key.
- **Legal Values**: String of 40 characters
- **Default Value**: Not Applicable
- **Write Privilege**: Configure iDRAC and Configure User
- **License Required**: iDRAC Express
- **Dependency**: User name must be configured prior to setting SHA1v3Key.
### iDRAC.Users.SNMPv3AuthenticationType (Read or Write)

**Description**  
Configure SNMPv3 authentication protocol type.

**Legal Values**  
- 0 — None  
- 1 — MD5  
- 2 — SHA  

**Default Value**  
2 — SHA

**Write Privilege**  
Configure iDRAC and Configure User

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
None

### iDRAC.Users.SNMPv3Enable (Read or Write)

**Description**  
Enables or disables SNMPv3 support for an iDRAC User.

**Legal Values**  
- 0 — Disabled  
- 1 — Enabled  

**Default Value**  
0 — Disabled

**Write Privilege**  
Configure iDRAC and Configure User

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
None

### iDRAC.Users.SNMPv3PrivacyType (Read or Write)

**Description**  
Configure SNMPv3 privacy protocol type.

**Legal Values**  
- 0 — None  
- 1 — DES  
- 2 — AES  

**Default Value**  
2 — AES

**Write Privilege**  
Configure iDRAC and Configure User

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
None
iDRAC.Users.SolEnable (Read or Write)

Description
Enables or Disables SOL for the user.

Legal Values
- 0 — Disabled
- 1 — Enabled

Default Value
0 — Disabled

Write Privilege
Configure iDRAC and Configure User

License Required
iDRAC Express or iDRAC Enterprise

Dependency
Both username and password must be configured prior to sets.

iDRAC.Users UserName (Read or Write)

Description
iDRAC User Name.

Legal Values
String of up to 16 ASCII characters

Default Value
Not Applicable

Write Privilege
Configure iDRAC and Configure User

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

iDRAC.vflashpartition

The objects in this group manage vFlash SD partitions on iDRAC.

This group supports the following objects. Up to 16 partitions are supported, indexed from 1 to 16.

iDRAC.vflashpartition.AccessType (Read or Write)

Description
Specifies if the access type of the vFlash SD partition is Read-Only or Read-Write.

Legal Values
- 1 — Read Only
- 0 — Read Write

Default value
1 — Read Only

Write Privilege
Login and configure iDRAC

License Required
iDRAC Enterprise

Dependency
vFlash SD card must be enabled. Partition at the specified index must be created.
### iDRAC.vflashpartition.AttachState (Read or Write)

**Description**
Specifies if the vFlash SD partition is attached or detached.

**Legal Values**
- 1 — Attached
- 0 — Detached

**Default value**
0 — Detached

**Write Privilege**
Login and configure iDRAC

**License Required**
iDRAC Enterprise

**Dependency**
vFlash SD card must be enabled. Partition at the specified index must be created.

### iDRAC.vflashpartition.EmulationType (Read or Write)

**Description**
Specifies the emulation type of the vFlash SD partition.

**Legal Values**
- HDD
- FLOPPY
- CD-DVD

**Default value**
None

**Write Privilege**
Login and configure iDRAC

**License Required**
iDRAC Enterprise

**Dependency**
vFlash SD card must be enabled. Partition at the specified index must be created.

### iDRAC.vflashpartition.FormatType (Read or Write)

**Description**
Specifies the file system format type of the vFlash SD partition.

**Legal Values**
- FAT16
- FAT32
- EXT2
- EXT3
- RAW

**Default value**
None

**Write Privilege**
Login and configure iDRAC

**License Required**
iDRAC Enterprise

**Dependency**
vFlash SD card must be enabled. Partition at the specified index must be created.
iDRAC.vflashpartition.Size (Read or Write)

Description: Specifies the size of the vFlash SD partition.
Legal Values: Integer value in MB
Default Value: None
Write Privilege: Login and configure iDRAC
License Required: iDRAC Enterprise
Dependency: vFlash SD card must be enabled. Partition at the specified index must be created.

iDRAC.vflashpartition.VolumeLabel (Read or Write)

Description: Specifies the label assigned to the partition during the vFlash SD partition creation.
Legal Values: String of up to six characters.
Default Value: None
Write Privilege: Login and configure iDRAC
License Required: iDRAC Enterprise
Dependency: vFlash SD card must be enabled. Partition at the specified index must be created.

iDRAC.vflashsd

The objects in this group manage vFlash SD properties on iDRAC.

iDRAC.vflashsd.AvailableSize (Read or Write)

Description: Displays the available memory (in MB) on the vFlash SD card that is used to create new partitions.
Legal Values: Integer value in MB.
Default Value: If the card is not initialized, then the default value is 0. If initialized, then it displays the unused memory on the card.
Write Privilege: Login and configure iDRAC
License Required: iDRAC Enterprise
Dependency: vFlash SD card must be enabled.

iDRAC.vflashsd.Enable (Read or Write)

Description: Enables or disables the vFlash SD card on iDRAC.
Legal Values:
- 0 — Disabled
- 1 — Enabled
Default Value: 0 — Disabled
iDRAC.vflashsd.Health (Read or Write)

Description: Specifies current health status of the vFlash SD Card.

Legal Values:
- OK
- Warning
- Critical
- Unknown

Default value: OK

Write Privilege: Login and configure iDRAC
License Required: iDRAC Enterprise
Dependency: vFlash SD card must be enabled.

iDRAC.vflashsd.Initialized (Read or Write)

Description: Specifies if the vFlash SD card is initialized or not.

Legal Values:
- 0 — Not Initialized
- 1 — Initialized

Default value: None

Write Privilege: Login and configure iDRAC
License Required: iDRAC Enterprise
Dependency: vFlash SD card must be enabled.

iDRAC.vflashsd.Licensed (Read or Write)

Description: Specifies if the SD card or vFlash SD card is inserted or not.

Legal Values:
- 0 — Not Licensed
- 1 — Licensed

Default value: None

Write Privilege: Login and configure iDRAC
License Required: iDRAC Enterprise
Dependency: vFlash SD card must be enabled.
iDRAC.vflashsd.Size (Read or Write)

Description: Specifies the remaining size of the vFlash SD card for usage.
Legal Values: Integer value in MB.
Default value: None
Write Privilege: Login and configure iDRAC
License Required: iDRAC Enterprise
Dependency: vFlash SD card must be enabled.

iDRAC.vflashsd.WriteProtect (Read or Write)

Description: Displays if the physical write protect is enabled or disabled on the vFlash SD card.
Legal Values:
- 0 — Disabled
- 1 — Enabled
Default value: None
Write Privilege: Login and configure iDRAC
License Required: iDRAC Enterprise
Dependency: vFlash SD card must be enabled.

iDRAC.VirtualConsole

The objects in this group enable you to manage virtual console configuration parameters of iDRAC.

iDRAC.VirtualConsole.AccessPrivilege (Read or Write)

Description: Default action upon session sharing request timeout.
Legal Values:
- 0 — Deny Access
- 1 — Read Only Access
- 2 — Full Access
Default Value: 0 — Deny Access
Write Privilege: Configure iDRAC
License Required: iDRAC Express (For Blades) or iDRAC Enterprise
Dependency: None
iDRAC.VirtualConsole.AttachState (Read or Write)

**Description**
Specifies the Attach State for the Virtual Console.

**Legal Values**
- 0 - Detached
- 1 - Attached
- 2 - Auto-Attach

**Default Value**
2 - Auto-Attach

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

iDRAC.VirtualConsole.Enable (Read or Write)

**Description**
Enables or disables the Virtual Console.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
1 — Enabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express (For Blades) or iDRAC Enterprise

**Dependency**
None

iDRAC.VirtualConsole.EncryptEnable (Read or Write)

**Description**
Encrypts the video in a Virtual Console session.

**Legal Values**
- 0 - Disabled
- 1 - Enabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express (For Blades) or iDRAC Enterprise

**Dependency**
None
### iDRAC.VirtualConsole.LocalVideo (Read or Write)

**Description**
Enables or disables the local server video.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
1 — Enabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express (For Blades) or iDRAC Enterprise

**Dependency**
None

### iDRAC.VirtualConsole.MaxSessions (Read or Write)

**Description**
Specifies maximum number of virtual console sessions.

**Legal Values**
Integral values: 1–4

**Default Value**
4

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express (For Blades) or iDRAC Enterprise

**Dependency**
None

### iDRAC.VirtualConsole.PluginType (Read or Write)

**Description**
Specifies the plugin type to use while running virtual console from the browser.

**Legal Values**
- 0 — Active X
- 1 — Java
- 2 — HTML5

**Default Value**
0 — Active X

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express (For Blades) or iDRAC Enterprise

**Dependency**
None
iDRAC.VirtualConsole.Port (Read or Write)

Description: Specifies the virtual KVM port.
Legal Values: Integral values: 1–65535
Default Value: 5900
Write Privilege: Configure iDRAC
License Required: iDRAC Express (For Blades) or iDRAC Enterprise
Dependency: None

iDRAC.VirtualConsole.Timeout (Read or Write)

Description: Defines the idle timeout in seconds for the virtual console.
Legal Values: Integral values: 60–10800
Default Value: 1800
Write Privilege: Configure iDRAC
License Required: iDRAC Express (For Blades) or iDRAC Enterprise
Dependency: None

iDRAC.VirtualMedia

The objects in this group enable you to manage virtual media configuration parameters of iDRAC.

iDRAC.VirtualMedia.Attached (Read or Write)

Description: Used to attach virtual devices to the system using the USB bus.
Legal Values:
- 0 — Detached
- 1 — Attached
- 2 — AutoAttach
Default Value: 2 — AutoAttach
Write Privilege: Virtual Media
License Required: iDRAC Express (For Blades) or iDRAC Enterprise
### iDRAC.VirtualMedia.BootOnce (Read or Write)

**Description**
Enables or disables the virtual media boot once feature of the iDRAC.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
0 — Disabled

**Write Privilege**
Virtual Media

**License Required**
iDRAC Express (For Blades) or iDRAC Enterprise

**Dependency**
None

### iDRAC.VirtualMedia.Enable (Read or Write)

**Description**
Enables or Disables the Virtual Media.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
0 — Disabled

**Write Privilege**
Virtual Media

**License Required**
iDRAC Express (For Blades) or iDRAC Enterprise

**Dependency**
None

### iDRAC.VirtualMedia.EncryptEnable (Read or Write)

**Description**
Specifies the Virtual Media encryption

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default Value**
0 — Disabled

**Write Privilege**
Virtual Media

**License Required**
iDRAC Express (For Blades) or iDRAC Enterprise

**Dependency**
None
**iDRAC.VirtualMedia.FloppyEmulation (Read or Write)**

**Description**
Enables or disables floppy emulation of the attached virtual media.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default value**
0 — Disabled

**Write Privilege**
Virtual Media

**License Required**
iDRAC Express (For Blades) or iDRAC Enterprise

**Dependency**
None

---

**iDRAC.VNCServer**

The objects in this group manages configuration of the VNC Server on iDRAC.

---

**iDRAC.VNCServer.Enable (Read or Write)**

**Description**
Enables or disables VNC server on iDRAC.

**Legal Values**
- 0 — Disabled
- 1 — Enabled

**Default value**
0 — Disabled

**Write Privilege**
Login or configure iDRAC

**License Required**
iDRAC Enterprise

**Dependency**
None

---

**iDRAC.VNCServer.LowerEncryptionBitLength (Read or Write)**

**Description**
Lower encryption bit length.

**Legal Values**
- 0 — Disabled (Auto Negotiate)
- 1 — Enabled (128-Bit or Higher)

**Default Value**
0 — Disabled (Auto Negotiate)

**Write Privilege**
Login or configure iDRAC

**License Required**
iDRAC Enterprise

**Dependency**
None
iDRAC.VNCServer.Password (Read or Write)

Description: Password for logging into VNC session.
Legal Values: String of up to 8 characters
Default Value: None
Write Privilege: Login or configure iDRAC
License Required: iDRAC Enterprise
Dependency: None

iDRAC.VNCServer.Port (Read or Write)

Description: Port number for VNC session
Legal Values: Integer values from 1024 to 65535
Default Value: 5901
Write Privilege: Login or configure iDRAC
License Required: iDRAC Enterprise
Dependency: None

iDRAC.VNCServer.SSLEncryptionBitLength (Read or Write)

Description: Indicates the VNC server encryption state.
Legal Values:
- 0 — Disabled
- 1 — Auto negotiate
- 2 — 128 bit or higher
- 3 — 168 bit or higher
- 4 — 256 bit or higher
Default Value: 0 — Disabled
Write Privilege: iDRAC Configure
License Required: iDRAC Enterprise
Dependency: None

iDRAC.VNCServer.Timeout (Read or Write)

Description: VNC server idle timeout period in seconds.
Legal Values: Integer values from 60 to 10800
Default Value: 300
Write Privilege: Login or configure iDRAC
iDRAC.WebServer

The objects in this group provide configuration parameters for iDRACs' Webserver.

**iDRAC.WebServer.Enable (Read or Write)**

**Description**

Enables or disables iDRAC WebServer.

**Legal Values**

- 0 — Disabled
- 1 — Enabled

**Default Value**

1 — Enabled

**Write Privilege**

Configure iDRAC

**License Required**

iDRAC Express or iDRAC Enterprise

**Dependency**

None

**iDRAC.WebServer.HttpPort (Read or Write)**

**Description**

Specifies the port number for HTTP communication with the iDRAC.

**Legal Values**

Integral values: 1–65535

**Default Value**

80

**Write Privilege**

Configure iDRAC

**License Required**

iDRAC Express or iDRAC Enterprise

**Dependency**

None

**iDRAC.WebServerHttpsPort (Read or Write)**

**Description**

Specifies the port number for HTTPS communication with the iDRAC.

**Legal Values**

Integral values: 1–65535

**Default Value**

443

**Write Privilege**

Configure iDRAC

**License Required**

iDRAC Express or iDRAC Enterprise

**Dependency**

None
### iDRAC.Webserver.Httpsredirection (Read or Write)

**Description**
Enables or disables redirection from the http port (default — 80) to https (default — 443).

**Legal Values**
- 1 — Enabled
- 0 — Disabled

**Default Value**
1 — Enabled

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### iDRAC.WebServer.LowerEncryptionBitLength (Read or Write)

**Description**
Lower Encryption Bit Length.

**Legal Values**
- 0 — Disabled (Auto Negotiate)
- 1 — Enabled (12 Bit or Higher)

**Default Value**
1 — Enabled (128 Bit or Higher)

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### iDRAC.WebServer.SSLEncryptionBitLength (Read or Write)

**Description**
Indicates the web server encryption state.

**Legal Values**
- 0 — Auto negotiate
- 1 — 128 bit or higher
- 2 — 168 bit or higher
- 3 — 256 bit or higher

**Default value**
1 — 128 bit or higher

**Write Privilege**
iDRAC Configure

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
iDRAC.WebServer.Timeout (Read or Write)

**Description**
Defines the webserver timeout.

**Legal Values**
Integral values: 60–10800

**Default Value**
1800

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

iDRAC.WebServer.TLSProtocol (Read or Write)

**Description**
Defines the TLS protocol support.

**Legal Values**
- 0 — TLS 1.0 and higher
- 1 — TLS 1.1 and higher
- 2 — TLS 1.2 only

**Default Value**
1 — TLS 1.1 and higher

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

BIOS.BiosBootSettings

You can manage the BIOS start settings using the objects in this group.

BIOS.BiosBootSettings.BootSeq (Read or Write)

**Description**
Determines the Bios start sequence of the system.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Read Only if BootMode is set to UEFI
NOTE: If BootMode is set to UEFI, legacy boot settings are not available in the system. Similarly, if BootMode is set to Legacy BIOS, UEFI settings are not available in the system.

**BIOS.BiosBootSettings.BootMode (Read or Write)**

**Description**
Determines the start mode of the system.

**Legal Values**
- BIOS
- UEFI

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.BiosBootSettings.BootSeqRetry (Read or Write)**

**Description**
Enables or disables the boot sequence retry feature.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.BiosBootSettings.HddFailover (Read or Write)**

**Description**
Specifies the devices in the Hard-Disk Drive Sequence menu that are attempted in the boot sequence. This property applies to BIOS Boot Mode only, and is disabled when Boot Mode is set to UEFI. When set to Disabled (default), only the first Hard-Disk device in the list is attempted to boot. When set to Enabled, all Hard-Disk devices are attempted in order, as listed in the Hard-Disk Drive Sequence.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
### BIOS.BiosBootSettings.HddSeq (Read or Write)

- **Description**: HDD boot sequence
- **Legal Values**: None
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Read Only if Boot mode is set to UEFI

### BIOS.BiosBootSettings.UefiBootSeq (Read or Write)

- **Description**: UEFI boot sequence
- **Legal Values**: None
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Read Only if Boot mode is set to BIOS

### BIOS.BiosBootSettings.SetBootOrderFqddn (Read or Write)

- **Description**: Specifies a list of FQDDs that has the boot list to apply on the next boot. In the attribute `SetBootOrderFqddn`, the value of `n` can be 1 to 16
- **Legal Values**: String of UEFI boot devices
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

### BIOS.BiosBootSettings.SetLegacyHddOrderFqddn (Read or Write)

- **Description**: Specifies a list of FQDDs that has the legacy HDD list to apply on the next boot. In the attribute `SetLegacyHddOrderFqddn`, the value of `n` can be 1 to 16
- **Legal Values**: String of UEFI boot devices
BIOS.EmbServerMgmt

The objects in this group assist in embedded server management.

BIOS.EmbServerMgmt.FrontLcd (Read or Write)

Description: Allows to display the default (Model name and number) or a user-defined string in the front-panel LCD. To modify the advanced features of the front-panel LCD, press F2 during boot to enter System Setup and then select iDRAC Settings.

Legal Values:
- None
- UserDefined
- ModelNum
- Advanced

Default Value: None
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.EmbServerMgmt.UserLcdStr (Read or Write)

Description: Allows you to view or enter the User-Defined String to display on the LCD.

Legal Values: String of up to 62 Characters
Default Value: Null
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.IntegratedDevices

You can use the objects in this group to manage the integrated devices such as internal NIC and integrated USB.

BIOS.IntegratedDevices.EmbNic1 (Read or Write)

Description: Enables or disables the operating system interface of the embedded NIC1.

Legal Values:
- Enabled
- EnabledPxe
- EnablediScsi
- Disabled

**Default Value** Not Applicable

**Write Privilege** Server Control

**License Required** iDRAC Express or iDRAC Enterprise

**Dependency** None

---

**BIOS.IntegratedDevices.EmbNic1Nic2 (Read or Write)**

**Description** Enables or disables the operating system interface of the embedded NIC1 and NIC2 controllers.

**Legal Values**
- Enabled
- Disabled
- Disabled OS

**Default Value** Not Applicable

**Write Privilege** Server Control

**License Required** iDRAC Express or iDRAC Enterprise

**Dependency** None

---

**BIOS.IntegratedDevices.EmbNic2 (Read or Write)**

**Description** Enables or disables the operating system interface of the embedded NIC2.

**Legal Values**
- Enabled
- EnabledPxe
- EnablediScsi
- Disabled

**Default Value** Not Applicable

**Write Privilege** Server Control

**License Required** iDRAC Express or iDRAC Enterprise

**Dependency** None
**BIOS.IntegratedDevices.EmbNic3** *(Read or Write)*

**Description**
Enables or disables the operating system interface of the embedded NIC3.

**Legal Values**
- Enabled
- EnabledPxe
- EnablediScsi
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.IntegratedDevices.EmbNic3Nic4** *(Read or Write)*

**Description**
Enables or disables the operating system interface of the embedded NIC3 and NIC4 controllers.

**Legal Values**
- Enabled
- Disabled OS
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.IntegratedDevices.EmbNic4** *(Read or Write)*

**Description**
Enables or disables the operating system interface of the embedded NIC4.

**Legal Values**
- Enabled
- EnabledPxe
- EnablediScsi
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise
### BIOS.IntegratedDevices.EmbVideo (Read or Write)

**Description:** Enables or disables the BIOS support for the embedded video controller.

**Legal Values:**
- Enabled
- Disabled

**Default Value:** Not Applicable

**Write Privilege:** Server Control

**License Required:** IDRAC Express or IDRAC Enterprise

**Dependency:** None

### BIOS.IntegratedDevices.GlobalSlotDriverDisable

**Description:** Controls the pre-boot driver on any slot.

**Legal Values:**
- Enabled
- Disabled

**Default Value:** NA

**Write Privilege:** Server control

**License Required:** RACADM

**Dependency:** None

### BIOS.IntegratedDevices.IntegratedNetwork1 (Read or Write)

**Description:** Enables or disables the Integrated Network Card 1.

**Legal Values:**
- Enabled
- Disabled OS

**Default Value:** Not Applicable

**Write Privilege:** Server Control

**License Required:** IDRAC Express or IDRAC Enterprise

**Dependency:** None
### BIOS.IntegratedDevices.IntegratedNetwork2 (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Enables or disables the integrated network card 2.</th>
</tr>
</thead>
</table>
| Legal Values | • Enabled  
             • DisabledOS |
| Default Value | Not Applicable |
| Write Privilege | Server Control |
| License Required | iDRAC Express or iDRAC Enterprise |
| Dependency | None |

### BIOS.IntegratedDevices.IntegratedRaid (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Enables or disables the integrated RAID controller.</th>
</tr>
</thead>
</table>
| Legal Values | • Enabled  
             • Disabled |
| Default Value | Not Applicable |
| Write Privilege | Server Control |
| License Required | iDRAC Express or iDRAC Enterprise |
| Dependency | None |

### BIOS.IntegratedDevices.IntegratedSas (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Enables or disables the integrated SAS controller.</th>
</tr>
</thead>
</table>
| Legal Values | • Enabled  
             • Disabled |
| Default Value | Not Applicable |
| Write Privilege | Server Control |
| License Required | iDRAC Express or iDRAC Enterprise |
| Dependency | None |
**BIOS.IntegratedDevices.InternalSdCard (Read or Write)**

**Description**
Enables or disables the internal SD Card port.

**Legal Values**
- On
- Off

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.IntegratedDevices.InternalSdCardRedundancy (Read or Write)**

**Description**
Sets the SD Card redundancy mode.

**Legal Values**
- Mirror
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Read Only if InternalSdCard is set to ‘Off’.

---

**BIOS.IntegratedDevices.InternalUsb (Read or Write)**

**Description**
Enables or disables the internal USB port.

**Legal Values**
- On
- Off

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
**BIOS.IntegratedDevices.InternalUsb1 (Read or Write)**

**Description**
Enables or disables the internal USB port 1.

**Legal Values**
- On
- Off

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.IntegratedDevices.InternalUsb2 (Read or Write)**

**Description**
Enables or disables the internal USB port 2.

**Legal Values**
- On
- Off

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.IntegratedDevices.IONonPostedPrefetch**

**Description**
Enables or disables the PCI IO non-posted pre-fetch mode to control the PCIe throughput. When this option is enabled, the read operation from the PCI devices are optimized. However, performance is reduced for write operation from the PCI devices.

**Legal Values**
- Enabled
- Disabled

**Default Value**
NA

**Write Privilege**
Server control

**License Required**
RACADM

**Dependency**
None
**BIOS.IntegratedDevices.IoatEngine (Read or Write)**

**Description**
Enables or disables the I/O Acceleration technology (I/OAT) option.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.IntegratedDevices.IONonPostedPrefetch**

**Description**
Enables or disables the PCI IO non-posted pre-fetch mode to control the PCIe throughput. When this option is enabled, the read operation from the PCI devices are optimized. However, performance is reduced for write operation from the PCI devices.

**Legal Values**
- Enabled
- Disabled

**Default Value**
NA

**Write Privilege**
Server control

**License Required**
RACADM

**Dependency**
None

**BIOS.IntegratedDevices.MmioAbove4GB (Read or Write)**

**Description**
Enables or disables support for PCIe devices that require large amount of memory. Enable this option only for 64-bit operating systems.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
**BIOS.IntegratedDevices.OsWatchdogTimer** *(Read or Write)*

**Description**
Enables or disables timer initialization by the operating system.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.IntegratedDevices.SriovGlobalEnable** *(Read or Write)*

**Description**
Enables or disables BIOS configuration of Single Root I/O Virtualization (SR-IOV) devices.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.IntegratedDevices.UsbPorts** *(Read or Write)*

**Description**
Sets the user accessible USB ports.

**Legal Values**
- All on
- Only back ports on
- All off

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
## BIOS.MemSettings

To manage memory-related configuration settings, use the objects in this group.

### BIOS.MemSettings.MemLowPower (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Enables or disables the low-power mode of the memory.</th>
</tr>
</thead>
</table>
| Legal Values                 | • Enabled  
|                              | • Disabled  |
| Default Value                | Not Applicable |
| Write Privilege              | Server Control |
| License Required             | iDRAC Express or iDRAC Enterprise |
| Dependency                   | None |

### BIOS.MemSettings.MemOpMode (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Current memory operating mode.</th>
</tr>
</thead>
</table>
| Legal Values                 | • OptimizerMode  
|                              | • SpareMode  
|                              | • MirrorMode  
|                              | • AdvEccMode  
|                              | • SpareWithAdvEccMode  |
| Default Value                | Not Applicable |
| Write Privilege              | Server Control |
| License Required             | iDRAC Express or iDRAC Enterprise |
| Dependency                   | None |

### BIOS.MemSettings.MemOptimizer (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Configure the memory optimizer setting.</th>
</tr>
</thead>
</table>
| Legal Values                 | • Enabled  
|                              | • Disabled  |
| Default Value                | Not Applicable |
| Write Privilege              | Server Control |
BIOS.MemSettings.MemOpVoltage (Read Only)

Description: Operating voltage of memory.

Legal Values:
- AutoVolt
- Volt15V

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

BIOS.MemSettings.MemTest (Read or Write)

Description: Specifies whether BIOS software-based system memory tests are conducted during POST.

Legal Values:
- Enabled
- Disabled

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

BIOS.MemSettings.NodeInterleave (Read or Write)

Description: If the system is configured with matching memory this field enables node interleaving.

Legal Values:
- Enabled
- Disabled

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None
BIOS.MemSettings.RedundantMem (Read or Write)

Description  Enables or disables the redundant memory feature.

Legal Values  • Disabled  
              • Spare  
              • Mirror  
              • IntraNodeMirror  
              • DimmSpare  
              • Ddrc

Write Privilege  Server Control

License Required  iDRAC Express or iDRAC Enterprise

Dependency  None

BIOS.MemSettings.RedundantMemCfgValid (Read or Write)

Description  Redundant Memory Configuration Valid

Legal Values  • Invalid  
              • Valid

Default Value  Not Applicable

Write Privilege  Server Control

License Required  iDRAC Express or iDRAC Enterprise

Dependency  None

BIOS.MemSettings.RedundantMemInUse (Read Only)

Description  Display the current redundant memory setting in BIOS.

Legal Values  • NotInUse  
              • InUse

Default Value  Not Applicable

Write Privilege  Server Control

License Required  iDRAC Express or iDRAC Enterprise

Dependency  None
BIOS.MemSettings.Serialdbgout (Read or Write)

Description  Enables or disables the Serial Debug Out option.
Legal Values  
  •   Enabled
  •   Disabled
Default Value  Not Applicable
License Required  iDRAC Express or iDRAC Enterprise
Dependency  None

BIOS.MemSettings.SnoopFilter (Read or Write)

Description  Enables or disables the snoop filter option.

| NOTE: This attribute is not supported for 13th generation servers.

Legal Values  
  •   Enabled
  •   Disabled
Default Value  Not Applicable
Write Privilege  Server Control
License Required  iDRAC Express or iDRAC Enterprise
Dependency  None

BIOS.MemSettings.SysMemSize (Read or Write)

Description  Indicates the current amount of main memory in the system.
Legal Values  None
Default Value  Not Applicable
Write Privilege  Server Control
License Required  iDRAC Express or iDRAC Enterprise
Dependency  None
BIOS.MemSettings.SysMemSpeed (Read or Write)

Description: Indicates the current clock frequency of the main memory.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.MemSettings.SysMemType (Read or Write)

Description: Indicates the current type of main memory installed in the system.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.MemSettings.SysMemVolt (Read or Write)

Description: Displays the current operating voltage of main memory.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.MemSettings.VideoMem (Read or Write)

Description: Indicates the total amount of video memory available to the embedded video controller.
Legal Values: None
BIOS.MiscSettings

To manage the miscellaneous objects settings, use the object in this group.

BIOS.MiscSettings.AssetTag (Read or Write)

Description
Displays the current asset tag and the asset tag can be modified.

Legal Values
None

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

BIOS.MiscSettings.ErrPrompt (Read or Write)

Description
Enables or disables the F1 and F2 prompt on error.

Legal Values
- Enabled
- Disabled

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

BIOS.MiscSettings.InSystemCharacterization (Read or Write)

Description
The ratio of power and performance of a system is optimized by ISC when it is enabled.

Legal Values
- Enabled
- FastBoot
- Disabled
**BIOS.MiscSettings.NumLock (Read or Write)**

**Description**
Enable or disable the system boots with Num locks, not applicable for 84-key keyboards.

**Legal Values**
- On
- Off

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.MiscSettings.ReportKbdErr (Read or Write)**

**Description**
Enables or disables the keyboard-related error messages to be reported at system startup.

**Legal Values**
- Report
- No report

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.MiscSettings.SystemUefiShell (Read or Write)**

**Description**
Enables or disables the System UEFI Shell as a UEFI boot option choice.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise
**BIOS.MiscSettings.SysMgmtNVByte1 (Read or Write)**

- **Description**: Indicates the system management NVRAM byte 1.
- **Legal Values**: Integer
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

**BIOS.MiscSettings.SysMgmtNVByte2 (Read or Write)**

- **Description**: Indicates the system management NVRAM byte 2.
- **Legal Values**: Integer
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

**BIOS.MiscSettings.SystemUefiShell (Read or Write)**

- **Description**: Enables or disables the system UEFI shell as UEFI boot option.
- **Legal Values**: • Enabled • Disabled
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

**BIOS.MiscSettings.ForceInt10 (Read or Write)**

- **Description**: Specifies if the system BIOS will load the legacy video (INT 10h) option ROM from the video controller.
- **Legal Values**: • Enabled • Disabled
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
BIOS.NetworkSettings

The objects in this group manage the iSCSI devices.

BIOS.NetworkSettings.PxeDevnEnDis (Read or Write)

Description: Indicates if the PXE device is enabled or disabled. When enabled, a UEFI boot option is created for the PXE device.

Legal Values:
- Enabled
- Disabled

Default Value: None

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

NOTE: For the attribute PxeDevnEnDis, the value of \( n \) can be 2 — 4.

BIOS.OneTimeBoot

You can manage the one time boot settings using the objects in this group.

BIOS.OneTimeBoot.OneTimeBootMode (Read or Write)

Description: Configure the one time boot mode setting.

Legal Values:
- Disabled
- OneTimeBootSeq
- OneTimeHddSeq
- OneTimeUefiBootSeq

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

NOTE: On a Dell 13th generation of PowerEdge server, to set the value from OneTimeBootMode to OneTimeUefiBootSeq, you must boot the server in UEFI mode.
BIOS.OneTimeBoot.OneTimeBootSeqDev (Read or Write)

Description: Configure the one time boot sequence device in BIOS.

Legal Values: Hard Disk List

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Read Only if OneTimeBootMode is not set to OneTimeBootSeq.

BIOS.OneTimeBoot.OneTimeCustomBootStr (Read or Write)

Description: Configure the one time custom boot device.

Legal Values: Custom device list

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Read Only if OneTimeBootMode is set to Disabled or set to OneTimeBootSeq, OneTimeHddSeq or OneTimeUefiBootSeq

BIOS.OneTimeBoot.OneTimeHddSeqDev (Read or Write)

Description: Configure the one time Hard Disk Drive (HDD) sequence for BIOS.

Legal Values: RAID FQDD

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Read Only if OneTimeBootMode is not set to OneTimeHddSeq
BIOS.OneTimeBoot.OneTimeUefiBootSeqDev (Read or Write)

Description: Configure the one time UEFI Boot Sequence device.

Legal Values: NIC or Optical Device list

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Read Only if OneTimeBootMode is not set to OneTimeUefiBootSeq

BIOS.ProcSettings

To configure the processor settings, use the objects in this group.

BIOS.ProcSettings.CorePerfBoost (Read or Write)

Description: Enables or disables CPU core performance booster.

Legal Values:
- Enabled
- Disabled

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

BIOS.ProcSettings.DataReuse (Read or Write)

Description: Enables or disables data reuse in cache.

Legal Values:
- Enabled
- Disabled

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None
**BIOS.ProcSettings.DculpPrefetcher (Read or Write)**

*Description:* Enables or disables Data Cache Unit (DCU) IP Prefetcher.

*Legal Values:*
- Enabled
- Disabled

*Default Value:* Not Applicable

*Write Privilege:* Server Control

*License Required:* iDRAC Express or iDRAC Enterprise

*Dependency:* None

---

**BIOS.ProcSettings.DcuStreamerPrefetcher (Read or Write)**

*Description:* Enables or disables Data Cache Unit (DCU) Streamer Prefetcher.

*Legal Values:*
- Enabled
- Disabled

*Default Value:* Not Applicable

*Write Privilege:* Server Control

*License Required:* iDRAC Express or iDRAC Enterprise

*Dependency:* None

---

**BIOS.ProcSettings.DmaVirtualization (Read or Write)**

*Description:* Enables or disables hardware capabilities for DMA remapping and virtualization are available.

*Legal Values:*
- Enabled
- Disabled

*Default Value:* Not Applicable

*Write Privilege:* Server Control

*License Required:* iDRAC Express or iDRAC Enterprise

*Dependency:* None
**BIOS.ProcSettings.DynamicCoreAllocation** (Read or Write)

**Description**
Enables or disables the operating system capability to set the logical processors in idle state which helps to reduce power consumption.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.ProcSettings.LogicalProc** (Read or Write)

**Description**
To enable report all logical processors and to disable report one logical processor per core.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.ProcSettings.PerfMonitorDevices** (Read or Write)

**Description**
Allows to enable or disable the performance monitoring devices. When set to **Enabled**, the performance monitoring devices are visible to the operating system.

**NOTE:** The Performance Monitor Devices field is set to **Disabled** by default.

**Legal Values**
- Enabled
- Disabled

**Default Value**

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
### BIOS.ProcSettings.Proc1Brand (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Provides the processor brand name.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>None</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

### BIOS.ProcSettings.Proc1ControlledTurbo (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Controls the turbo engagement.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NOTE:</strong></td>
<td>You can enable this option only when System Profile is set to Performance.</td>
</tr>
<tr>
<td>Legal Values</td>
<td>• Disabled</td>
</tr>
<tr>
<td></td>
<td>• ControlledTurboLimit</td>
</tr>
<tr>
<td></td>
<td>• ControlledTurboLimitMinus1</td>
</tr>
<tr>
<td></td>
<td>• ControlledTurboLimitMinus2</td>
</tr>
<tr>
<td></td>
<td>• ControlledTurboLimitMinus3</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

### BIOS.ProcSettings.Proc1Id (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Provides the processor's family model and stepping values.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>None</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>
BIOS.ProcSettings.Proc1L2Cache (Read or Write)

- **Description**: Amount of memory in the corresponding processor cache.
- **Legal Values**: None
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

BIOS.ProcSettings.Proc1L3Cache (Read or Write)

- **Description**: Amount of memory in the corresponding processor cache.
- **Legal Values**: None
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

BIOS.ProcSettings.Proc1NumCores (Read or Write)

- **Description**: Number of cores in the processor package.
- **Legal Values**: None
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

BIOS.ProcSettings.Proc2Brand (Read or Write)

- **Description**: Provides the processor brand name.
- **Legal Values**: None
BIOS.ProcSettings.Proc2ControlledTurbo (Read or Write)

Description
Controls the turbo engagement.

NOTE: You can enable this option only when System Profile is set to Performance.

Legal Values
- Disabled
- ControlledTurboLimit
- ControlledTurboLimitMinus1
- ControlledTurboLimitMinus2
- ControlledTurboLimitMinus3

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

BIOS.ProcSettings.Proc2Cores

Description
Controls the number of enabled cores in each processor.

Legal Values
All, 1, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

Default Value
NA

Write Privilege
Server control

License Required
RACADM

Dependency
Requires the DPAT Pro license to make it visible. It can be edited only if the Number of Cores per Processor is set to Custom.

BIOS.ProcSettings.Proc2Id (Read or Write)

Description
Processor's family model and stepping values.

Legal Values
None

Default Value
Not Applicable
BIOS.ProcSettings.Proc2L2Cache (Read or Write)

Description
Amount of memory in the corresponding processor cache.

Legal Values
None

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

BIOS.ProcSettings.Proc2L3Cache (Read or Write)

Description
Amount of memory in the corresponding processor cache.

Legal Values
None

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

BIOS.ProcSettings.Proc2NumCores (Read or Write)

Description
Number of cores in the processor package.

Legal Values
None

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None
BIOS.ProcSettings.Proc3Brand (Read or Write)

Description  Brand text provided by the processor manufacturer.

Legal Values  None

Default Value  Not Applicable

Write Privilege  Server Control

License Required  iDRAC Express or iDRAC Enterprise

Dependency  None

BIOS.ProcSettings.Proc3ControlledTurbo (Read or Write)

Description  Controls the turbo engagement.

NOTE: You can enable this option only when System Profile is set to Performance.

Legal Values  
- Disabled
- ControlledTurboLimit
- ControlledTurboLimitMinus1
- ControlledTurboLimitMinus2
- ControlledTurboLimitMinus3

Default Value  Not Applicable

Write Privilege  Server Control

License Required  iDRAC Express or iDRAC Enterprise

Dependency  None

BIOS.Procsettings.Proc3Cores

Description  Controls the number of enabled cores in each processor.

Legal Values  All 1, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

Default Value  NA

Write Privilege  Server control

License Required  RACADM

Dependency  Requires the DPAT Pro license to make it visible. It can be edited only if the Number of Cores per Processor is set to Custom.
BIOS.ProcSettings.Proc3Id (Read or Write)

Description: Processor's family model and stepping values.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.ProcSettings.Proc3L2Cache (Read or Write)

Description: Amount of memory in the corresponding processor cache.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.ProcSettings.Proc3L3Cache (Read or Write)

Description: Amount of memory in the corresponding processor cache.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.ProcSettings.Proc3NumCores (Read or Write)

Description: Number of cores in the processor package.
Legal Values: None
**BIOS.ProcSettings.Proc4Brand (Read or Write)**

**Description**: The processor manufacturer provides brand text

**Legal Values**: None

**Default Value**: Not Applicable

**Write Privilege**: Server Control

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: None

---

**BIOS.ProcSettings.Proc4ControlledTurbo (Read or Write)**

**Description**: Controls the turbo engagement.

**Legal Values**:
- Disabled
- ControlledTurboLimit
- ControlledTurboLimitMinus1
- ControlledTurboLimitMinus2
- ControlledTurboLimitMinus4

**Default Value**: Not Applicable

**Write Privilege**: Server Control

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: Not Applicable

---

**BIOS.ProcSettings.Proc4Cores**

**Description**: Controls the number of enabled cores in each processor.

**Legal Values**: All, 1, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

**Default Value**: NA
### BIOS.ProcSettings.Proc4Id (Read or Write)

**Description**  
Processor's family model and stepping values.

**Legal Values**  
None

**Default Value**  
Not Applicable

**Write Privilege**  
Server Control

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
None

### BIOS.ProcSettings.Proc4L2Cache (Read or Write)

**Description**  
Amount of memory in the corresponding processor cache.

**Legal Values**  
None

**Default Value**  
Not Applicable

**Write Privilege**  
Server Control

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
None

### BIOS.ProcSettings.Proc4L3Cache (Read or Write)

**Description**  
Amount of memory in the corresponding processor cache.

**Legal Values**  
None

**Default Value**  
Not Applicable

**Write Privilege**  
Server Control

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
None
BIOS.ProcSettings.Proc4NumCores (Read or Write)

Description: Number of cores in the processor package.

Legal Values: None

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

BIOS.ProcSettings.Proc64bit (Read or Write)

Description: Specifies whether the installed processors support 64-bit extensions.

Legal Values: None

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

BIOS.ProcSettings.ProcAdjCacheLine (Read or Write)

Description: Enables or disables the system optimization for applications that require high utilization of sequential memory access.

Legal Values:
- Enabled
- Disabled

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None
**BIOS.ProcSettings.ProcBusSpeed (Read or Write)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Bus speed of the processor.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>None</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

**BIOS.ProcSettings.ProcConfigTdp (Read or Write)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Allows to re-configure the Thermal Design Power (TDP) to lower levels.</th>
</tr>
</thead>
</table>
| Legal Values      | • Nominal  
                     • Level1   
                     • Level2   |
| Default Value     | Not Applicable            |
| Write Privilege   | Server Control            |
| License Required  | iDRAC Express or iDRAC Enterprise                                    |
| Dependency        | Not Applicable            |

**BIOS.ProcSettings.ProcCores (Read or Write)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Controls the number of enabled cores in each processor.</th>
</tr>
</thead>
</table>
| Legal Values      | • Single  
                     • All  
                     • 1  
                     • 2  
                     • 4  
                     • 6  
                     • 8  
                     • 10  
                     • 12  
                     • 14  
                     • 16 |
| Default Value     | Not Applicable            |
| Write Privilege   | Server Control            |
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

### BIOS.ProcSettings.ProcCoreSpeed (Read or Write)

**Description**: Clock speed of the processor.

**Legal Values**: None

**Default Value**: Not Applicable

**Write Privilege**: Server Control

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: None

### BIOS.ProcSettings.ProcDramPrefetcher (Read or Write)

**Description**: Enable to turn on the DRAM prefetch unit in the Northbridge. Disable to prevent DRAM references from triggering DRAM prefetch requests.

**Legal Values**:  
- Enabled  
- Disabled

**Default Value**: Not Applicable

**Write Privilege**: Server Control

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: None

### BIOS.ProcSettings.ProcExecuteDisable (Read or Write)

**Description**: Specifies whether Execute Disable Memory Protection Technology is enabled or disabled.

**Legal Values**:  
- Enabled  
- Disabled

**Default Value**: Not Applicable

**Write Privilege**: Server Control

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: None
**BIOS.ProcSettings.ProcHpcMode (Read or Write)**

**Description**
Configure processor's HPC mode.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.ProcSettings.ProcHtAssist (Read or Write)**

**Description**
When enabled it provides filtering of broadcast probes to improve HyperTransport I/O Link bandwidth and performance on multi-node systems.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.ProcSettings.ProcHwPrefetcher (Read or Write)**

**Description**
When enabled, the processor is able to prefetch extra cache lines for every memory request.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
### BIOS.ProcSettings.ProcHyperTransport (Read or Write)

**Description**
Specifies the supported HyperTransport I/O Link Specification.

**Legal Values**
- HT1
- HT3

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### BIOS.ProcSettings.ProcSoftwarePrefetcher (Read or Write)

**Description**
Enables or disables the hardware prefetcher for considering software prefetches when detecting strides for prefetch requests.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### BIOS.ProcSettings.ProcVirtualization (Read or Write)

**Description**
When enabled, the additional hardware capabilities provided by virtualization technology are available for use.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
BIOS.ProcSettings.ProcX2Apic (Read or Write)

**Description**
Enables or disables the X2APIC mode.

**NOTE:** To enable BIOS.ProcSettings.ProcX2Apic, you must enable BIOS.ProcSettings.ProcVirtualization.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Disabled

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Read Only if the ProcVirtualization attribute is set to Disabled.

BIOS.ProcSettings.QpiBandwidthPriority (Read or Write)

**Description**
Sets the bandwidth priority to compute (default) or I/O.

**Legal Values**
- InputOutput
- Compute

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

BIOS.ProcSettings.QpiSpeed (Read or Write)

**Description**
Controls QuickPath Interconnect data rate settings.

**Legal Values**
- MaxDataRate
- 8 GTps
- 7 GTps
- 6 GTps

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
### BIOS.ProcSettings.RtidSetting (Read or Write)

**Description**: Allocates more RTIDs to the remote socket increasing cache performance between the sockets.

**Legal Values**
- Enabled
- Disabled

**Default Value**: Not Applicable

**Write Privilege**: Server Control

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: None

---

### BIOS.ProxyAttributes

The objects in this group manage the legacy boot protocol of LOM.

---

### BIOS.ProxyAttributes.EmbNicPortnBootproto (Read or Write)

**Description**: Controls the Legacy Boot Protocol of the LOM port specified by the Embedded NIC port. Assists in system management software and does not appear in System BIOS setup. The value of n can be 1–4.

This attribute returns Unknown when read. The LOM port legacy boot protocol setting is not changed when Unknown is written. An error is displayed if written with a setting (None, PXE, or iSCSI) that is not supported by the LOM.

**Legal Values**
- Unknown
- None
- Pxe
- Iscsi

**Default Value**: Not Applicable

**Write Privilege**: Server Control

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: None

---

### BIOS.ProxyAttributes.IntNic1PortnBootproto (Read or Write)

**Description**: Controls the Legacy Boot Protocol of the LOM Port specified by the Embedded NIC port number Port. Assists for system management software use and does not appear in System BIOS Setup. For this attribute, the value of n can be 1–4.
This attribute returns *Unknown* when read. The LOM port legacy boot protocol setting is not changed when *Unknown* is written. An error is returned if written with a setting (None, PXE, or iSCSI) that is not supported by the LOM.

<table>
<thead>
<tr>
<th>Legal Values</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Unknown</td>
<td></td>
</tr>
<tr>
<td>• None</td>
<td></td>
</tr>
<tr>
<td>• Pxe</td>
<td></td>
</tr>
<tr>
<td>• Iscsi</td>
<td></td>
</tr>
</tbody>
</table>

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

**BIOS.PxeDev1Settings**

The objects in this group manage the PXE device settings.

**BIOS.PxeDev1Settings.PxeDevnInterface (Read or Write)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Indicates the NIC Interface used for the specified PXE device. For the attribute PxeDevnInterface, the value of ( n ) can be 1 — 4.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>None</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

**BIOS.PxeDev1Settings.PxeDevnProtocol (Read or Write)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Controls the PXE protocol used for the specified PXE device. For the attribute PxeDevnProtocol, the value of ( n ) can be 1 — 4.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>• IPv4</td>
</tr>
<tr>
<td></td>
<td>• IPv6</td>
</tr>
<tr>
<td>Default Value</td>
<td>None</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>
**BIOS.PxeDev1Settings.PxeDevnVlanEnDis (Read or Write)**

**Description**
Indicates if the VLAN is enabled or disabled for the specified PXE device. For the attribute PxeDevnVlanEnDis, the value of \( n \) can be 1 — 4.

**Legal Values**
- Enabled
- Disabled

**Default Value**
None

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.PxeDev1Settings.PxeDevnVlanId (Read or Write)**

**Description**
Indicates the VLAN ID for the specified PXE device. For the attribute PxeDevnVlanId, the value of \( n \) can be 1 — 4.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.PxeDev1Settings.PxeDevnVlanPriority (Read or Write)**

**Description**
Indicates the VLAN priority for the specific PXE device. For the attribute PxeDevnVlanPriority, the value of \( n \) can be 1 — 4.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.SataSettings**

Use the objects in this group to configure the BIOS SATA settings.
**BIOS.SataSettings.eSataPort1 (Read or Write)**

**Description**
Sets the drive type of the selected device.

**Legal Values**
- Off
- Auto

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.SataSettings.eSataPort1Capacity (Read or Write)**

**Description**
Displays the total capacity of a hard-disk drive.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.SataSettings.eSataPort1DriveType (Read or Write)**

**Description**
Indicates type of device attached to this SATA port.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
BIOS.SataSettings.eSataPort1Model (Read or Write)

**Description**
Displays the drive model of the selected device.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

BIOS.SataSettings.SataPortA (Read or Write)

**Description**
Sets the drive type of the selected device.

**Legal Values**
- Off
- Auto

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Read Only if EmbSata is not set to AtaMode.

BIOS.SataSettings.SataPortACapacity (Read or Write)

**Description**
Displays the total capacity of a hard-disk drive.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
### BIOS.SataSettings.SataPortADriveType (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Indicates type of device attached to this SATA port.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
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</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

### BIOS.SataSettings.SataPortAModel (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Displays the drive model of the selected device.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>None</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

### BIOS.SataSettings.SataPortB (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Sets the drive type of the selected device.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>• Off</td>
</tr>
<tr>
<td></td>
<td>• Auto</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>Read Only if EmbSata is not set to AtaMode.</td>
</tr>
</tbody>
</table>
BIOS.SataSettings.SataPortBCapacity (Read or Write)

Description: Displays the total capacity of a hard-disk drive.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.SataSettings.SataPortBDriveType (Read or Write)

Description: Indicates type of device attached to this SATA port.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.SataSettings.SataPortBModel (Read or Write)

Description: Displays the drive model of the selected device.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.SataSettings.SataPortC (Read or Write)

Description: Sets the drive type of the selected device.
Legal Values: Off
Auto

Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: Read Only if EmbSata is not set to AtaMode.

BIOS.SataSettings.SataPortCCapacity (Read or Write)

Description: Displays the total capacity of a hard-disk drive.

Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.SataSettings.SataPortCDriveType (Read or Write)

Description: Indicates type of device attached to this SATA port.

Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.SataSettings.SataPortCModel (Read or Write)

Description: Displays the drive model of the selected device.

Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
| Dependency | None |

**BIOS.SataSettings.SataPortD (Read or Write)**

**Description**
Sets the drive type of the selected device.

**Legal Values**
- Off
- Auto

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Read Only if EmbSata is not set to AtaMode.

| Dependency | None |

**BIOS.SataSettings.SataPortDCapacity (Read or Write)**

**Description**
Displays the total capacity of a hard-disk drive.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

| Dependency | None |

**BIOS.SataSettings.SataPortDDriveType (Read or Write)**

**Description**
Indicates type of device attached to this SATA port.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
**BIOS.SataSettings.SataPortDModel (Read or Write)**

**Description**
Displays the drive model of the selected device.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.SataSettings.SataPortE (Read or Write)**

**Description**
Sets the drive type of the selected device.

**Legal Values**
- Off
- Auto

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Read Only if EmbSata is not set to AtaMode.

**BIOS.SataSettings.SataPortECapacity (Read or Write)**

**Description**
Displays the total capacity of a hard-disk drive.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
### BIOS.SataSettings.SataPortEDriveType (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Indicates type of device attached to this SATA port.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>None</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

### BIOS.SataSettings.SataPortEModel (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Displays the drive model of the selected device.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>None</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
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<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

### BIOS.SataSettings.SataPortF (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Sets the drive type of the selected device.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>- Off</td>
</tr>
<tr>
<td></td>
<td>- Auto</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>Read Only if EmbSata is not set to AtaMode.</td>
</tr>
</tbody>
</table>
**BIOS.SataSettings.SataPortFCapacity (Read or Write)**

**Description**
Displays the total capacity of a hard-disk drive.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.SataSettings.SataPortFDriveType (Read or Write)**

**Description**
Indicates type of device attached to this SATA port.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.SataSettings.SataPortFModel (Read or Write)**

**Description**
Displays the drive model of the selected device.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.SataSettings.SataPortG (Read or Write)**

**Description**
Sets the drive type of the selected device.

**Legal Values**
- Off
• Auto

Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: Read Only if EmbSata is not set to AtaMode.

**BIOS.SataSettings.SataPortGCapacity (Read or Write)**

Description: Displays the total capacity of a hard-disk drive.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

**BIOS.SataSettings.SataPortGDriveType (Read or Write)**

Description: Indicates type of device attached to this SATA port.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

**BIOS.SataSettings.SataPortGModel (Read or Write)**

Description: Displays the drive model of the selected device.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
**BIOS.SataSettings.SataPortH (Read or Write)**

- **Description**: Sets the drive type of the selected device.
- **Legal Values**: • Off  
  • Auto
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Read Only if EmbSata is not set to AtaMode.

**BIOS.SataSettings.SataPortHCapacity (Read or Write)**

- **Description**: Displays the total capacity of a hard disk drive.
- **Legal Values**: None
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

**BIOS.SataSettings.SataPortHDriveType (Read or Write)**

- **Description**: Indicates type of device attached to this SATA port.
- **Legal Values**: None
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None
**BIOS.SataSettings.SataPortHModel (Read Only)**

**Description**
Displays the drive model of the selected device.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.SataSettings.SataPortI (Read or Write)**

**Description**
Sets the drive type of the selected device.
When the Embedded SATA setting is in:

- ATA Mode, setting this attribute to Auto will enable the BIOS support for the device. Select Off to turn off the BIOS support for the device.
- AHCI Mode or RAID Mode, the BIOS always enables support for the device.

**Legal Values**
- Off
- Auto

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.SataSettings.SataPortICapacity (Read or Write)**

**Description**
Displays the total capacity of a hard-disk drive. This property is not defined for removable-media devices such as optical drives.

**Legal Values**
Not Applicable

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
### BIOS.SataSettings.SataPortIDriveType (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Indicates the type of device attached to this SATA port.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

### BIOS.SataSettings.SataPortIModel (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Displays the drive model of the selected device.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

### BIOS.SataSettings.SataPortJ (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Sets the drive type of the selected device.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>When the Embedded SATA setting is in:</td>
</tr>
<tr>
<td></td>
<td>• ATA Mode, set this property to Auto to enable the BIOS support for the device. Select Off to turn off the BIOS support for the device.</td>
</tr>
<tr>
<td></td>
<td>• AHCI Mode or RAID Mode, the BIOS always enables support for the device.</td>
</tr>
<tr>
<td>Legal Values</td>
<td>• Off</td>
</tr>
<tr>
<td></td>
<td>• Auto</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>
**BIOS.SataSettings.SataPortJCapacity (Read or Write)**

**Description**
Displays the total capacity of a hard-disk drive. This property is not defined for removable-media devices such as optical drives.

**Legal Values**
Not Applicable

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.SataSettings.SataPortJDriveType (Read or Write)**

**Description**
Indicates the type of device attached to this SATA port.

**Legal Values**
Not Applicable

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.SataSettings.SataPortJModel (Read or Write)**

**Description**
Displays the drive model of the selected device.

**Legal Values**
Not Applicable

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.SataSettings.SecurityFreezeLock (Read or Write)**

**Description**
Directs the Security Freeze Lock command to the Embedded SATA drives during POST. This option is only applicable for ATA and AHCI mode, and not applicable for RAID mode.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
BIOS.SerialCommSettings
To manage the serial port settings, use the objects in the group.

BIOS.SerialCommSettings.ConTermType (Read or Write)

**Description**
Configures the remote console’s terminal type.

**Legal Values**
- Vt100Vt220
- Ansi

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

BIOS.SerialCommSettings.ExtSerialConnector (Read or Write)

**Description**
Associate the External Serial Connector to Serial 1 or Serial 2 or Remote Access Device.

**Legal Values**
- Serial1
- Serial2
- RemoteAccDevice

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

BIOS.SerialCommSettings.FailSafeBaud (Read or Write)

**Description**
BIOS attempts to determine the baud rate automatically. This fail-safe baud rate is used only if the attempt is unsuccessful.

**Legal Values**
- 115200
- 57600
- 19200
- 9600

**Default Value**
Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

**BIOS.SerialCommSettings.RedirAfterBoot (Read or Write)**

**Description:** Enables or disables the BIOS console redirection when the operating system is loaded.

**Legal Values:**
- Enabled
- Disabled

**Default Value:** Not Applicable

**Write Privilege:** Server Control
**License Required:** iDRAC Express or iDRAC Enterprise
**Dependency:** None

**BIOS.SerialCommSettings.SerialComm (Read or Write)**

**Description:** Controls the serial communication options.

**Legal Values:**
- Off
- OnNoConRedir
- OnConRedirCom1
- OnConRedirCom2
- OnConRedir

**Default Value:** Not Applicable

**Write Privilege:** Server Control
**License Required:** iDRAC Express or iDRAC Enterprise
**Dependency:** None

**BIOS.SerialCommSettings.SerialPortAddress (Read or Write)**

**Description:** Port address for the Serial Devices. (COM1=0x3F8 COM2=0x2F8)

**Legal Values:**
- Serial1Com1Serial2Com2
- Serial1Com2Serial2Com1
- Com1
- Com2
BIOS.SlotDisablement

To manage the slot disablement settings, use the objects in this group.

BIOS.SlotDisablement.Slot1 (Read or Write)

Description
Control the configuration of the card installed in slot1.

Legal Values
- Enabled
- Disabled
- BootDriverDisabled

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

BIOS.SlotDisablement.Slot2 (Read or Write)

Description
Control the configuration of the card installed in slot 2.

Legal Values
- Enabled
- Disabled
- BootDriverDisabled

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None
**BIOS.SlotDisablement.Slot3 (Read or Write)**

**Description**
Control the configuration of the card installed in slot 3.

**Legal Values**
- Enabled
- Disabled
- BootDriverDisabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.SlotDisablement.Slot4 (Read or Write)**

**Description**
Control the configuration of the card installed in slot 4.

**Legal Values**
- Enabled
- Disabled
- BootDriverDisabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.SlotDisablement.Slot5 (Read or Write)**

**Description**
Control the configuration of the card installed in slot 5.

**Legal Values**
- Enabled
- Disabled
- BootDriverDisabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
**BIOS.SlotDisablement.Slot6 (Read or Write)**

**Description**
Control the configuration of the card installed in slot 6.

**Legal Values**
- Enabled
- Disabled
- BootDriverDisabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.SlotDisablement.Slot7 (Read or Write)**

**Description**
Control the configuration of the card installed in slot 7.

**Legal Values**
- Enabled
- Disabled
- BootDriverDisabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.SlotDisablement.Slot8 (Read or Write)**

**Description**
Controls configuration of the card installed in this slot. You can set one of the following options for each card:

- Enabled: The card is available during POST or to the operating system.
- Disabled: The card is not available during POST or to the operating system.
- Boot Driver Disabled: The Option ROM is not run during POST, the system cannot boot from the card, and the pre-boot services are not available. However, it is available to the operating system. This option is not available if the slot contains a Dell RAID card.

**NOTE:** If multiple cards from the same manufacturer are managed using the same boot driver, select BootDriverDisabled option for all the cards from the same manufacturer so that the Option ROM is not run.

**Legal Values**
- Enabled
- Disabled
- BootDriverDisabled
**BIOS.SlotDisablement.Slot9 (Read or Write)**

**Description**
Controls the configuration of the card installed in this slot. You can set one of the following options for each card:

- **Enabled**: The card is available during POST or to the operating system.
- **Disabled**: The card is not available during POST or to the operating system.
- **Boot Driver Disabled**: The Option ROM is not run during POST, the system cannot boot from the card, and the pre-boot services are not available. However, it is available to the operating system. This option is not available if the slot contains a Dell RAID card.

**NOTE**: If multiple cards from the same manufacturer are managed using the same boot driver, select `BootDriverDisabled` for all the cards from the same manufacturer so that the Option ROM is not run.

**Legal Values**
- Enabled
- Disabled
- BootDriverDisabled

**Default Value** Not Applicable

**Write Privilege** Server Control

**License Required** iDRAC Express or iDRAC Enterprise

**Dependency** None

---

**BIOS.SlotDisablement.Slot10 (Read or Write)**

**Description**
Controls configuration of the card installed in this slot. You can set one of the following option for each card:

- **Enabled**: The card is available during POST or to the operating system.
- **Disabled**: The card is not available during POST or to the operating system.
- **Boot Driver Disabled**: The Option ROM will not run during POST, the system cannot boot from the card, and the pre-boot services are not available. However, it is available to the operating system.

**NOTE**: This option is not available if the slot contains a Dell RAID card.

**NOTE**: If multiple cards from the same manufacturer are managed using the same boot driver, select `BootDriverDisabled` value for all the cards from the same manufacturer so that the Option ROM is not run.

**Legal Values**
- Enabled
- Disabled
- BootDriverDisabled

**Default Value** Not Applicable

**Write Privilege** Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

**BIOS.SysInformation**

To view information about system configuration, use the objects in this group.

**BIOS.SysInformation.SysMfrContactInfo (Read or Write)**

**Description**: Provides information about the Original Equipment Manufacturer of this system.

**Legal Values**: None

**Default Value**: Not Applicable

**Write Privilege**: Server Control

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: None

**BIOS.SysInformation.SystemBiosVersion (Read or Write)**

**Description**: Provides the current revision of the system BIOS firmware.

**Legal Values**: None

**Default Value**: Not Applicable

**Write Privilege**: Server Control

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: None

**BIOS.SysInformation.SystemCpldVersion (Read or Write)**

**Description**: Displays the current revision of the system CPLD firmware.

**Legal Values**: None

**Default Value**: Not Applicable

**Write Privilege**: Server Control

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: None
BIOS.SysInformation.SystemManufacturer (Read or Write)

Description: Provides the name of the Original Equipment Manufacturer of this system.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.SysInformation.SystemModelName (Read or Write)

Description: Provides the product name of the system.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.SysInformation.SystemServiceTag (Read or Write)

Description: The Service Tag assigns the Original Equipment Manufacturer of this system.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

BIOS.SysInformation.UefiComplianceVersion (Read or Write)

Description: Displays the system firmware UEFI compliance level.
Legal Values: Not Applicable
Default Value: Not Applicable
**BIOS.SysProfileSettings**

To manage the system profile settings, use the objects in this group.

**BIOS.SysProfileSettings.CollaborativeCpuPerfCtrl (Read/Write)**

- **Description**: Enables or disables the CPU power management control. When ProcPwrPerf is not set to SysDbpm in Custom mode, changing this setting does not affect system performance.
- **Legal Values**: • Enabled • Disabled
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Enabled only when SysProfileSettings.ProcPwrPerf is set to SysDbpm in Custom mode.

**BIOS.SysProfileSettings.EnergyEfficientTurbo (Read or Write)**

- **Description**: Enables or disables the energy efficient turbo.
- **Legal Values**: • Enabled • Disabled
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

**BIOS.SysProfileSettings.EnergyPerformanceBias (Read or Write)**

- **Description**: Indicates the energy performance settings.
- **Legal Values**: • MaxPower • BalancedPerformance • BalancedEfficiency
- LowPower

**Default Value** Not Applicable

**Write Privilege** Server Control

**License Required** iDRAC Express or iDRAC Enterprise

**Dependency** None

**BIOS.SysProfileSettings.MemFrequency (Read or Write)**

**Description** Set the speed of the system memory to maximum performance, maximum reliability or a specific speed.

**Legal Values**
- MaxPerf
- 1600MHz
- 1333MHz
- 1067MHz
- 800MHz
- MaxReliability

**Default Value** Not Applicable

**Write Privilege** Server Control

**License Required** iDRAC Express or iDRAC Enterprise

**Dependency** Read Only if SysProfileSettings.SysProfile is not set to Custom mode.

**BIOS.SysProfileSettings.MemPatrolScrub (Read or Write)**

**Description** Patrol scrubbing is a feature that searches the memory for errors and repairs correctable errors to prevent the accumulation of memory errors.

**Legal Values**
- Standard
- Extended
- Disabled

**Default Value** Not Applicable

**Write Privilege** Server Control

**License Required** iDRAC Express or iDRAC Enterprise

**Dependency** Read Only if SysProfileSettings.SysProfile is not set to Custom mode.
BIOS.SysProfileSettings.MemPwrMgmt (Read or Write)

Description: Enables or disables the memory to operate in power management mode.

Legal Values:
- Enabled
- Disabled

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

BIOS.SysProfileSettings.MemRefreshRate (Read or Write)

Description: Frequency at which memory is normally refreshed.

Legal Values:
- 1x
- 2x

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Read Only if SysProfileSettings.SysProfile is not set to Custom mode.

BIOS.SysProfileSettings.MemVolt (Read or Write)

Description: Sets the DIMM voltage selection.

Legal Values:
- AutoVolt
- Volt135V
- Volt15V

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Read Only if SysProfileSettings.SysProfile is set to Custom mode.
**BIOS.SysProfileSettings.MonitorMwait (Read or Write)**

**Description**
Enables or disables Monitor or Mwait instructions. When C state is enabled in Custom mode, changing this setting does not affect system performance.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Disabled only when `SysProfileSettings.ProcCStates` state is disabled in Custom mode.

---

**BIOS.SysProfileSettings.PowerDelivery (Read or Write)**

**Description**
Sets the power delivery mode.

**Legal Values**
- MaxReliability
- MinPwr

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.SysProfileSettings.ProcC1E (Read or Write)**

**Description**
When enabled, the processor is allowed to switch to minimum performance state when idle.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Read Only if `SysProfileSettings.SysProfile` is not set to Custom mode.
**BIOS.SysProfileSettings.ProcCStates (Read or Write)**

**Description**  
Enables or disables the processor C-States.

**Legal Values**  
- Enabled
- Disabled

**Default Value**  
Not Applicable

**Write Privilege**  
Server Control

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
Read Only if SysProfileSettings.SysProfile is not set to Custom mode.

**BIOS.SysProfileSettings.ProcPwrPerf (Read or Write)**

**Description**  
Sets CPU power management to maximum performance operating system DBPM or System DBPM (DAPC) mode.

**Legal Values**  
- MaxPerf
- MinPwr
- SysDbpm
- OsDbpm

**Default Value**  
Not Applicable

**Write Privilege**  
Server Control

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
Read Only if SysProfileSettings.SysProfile is not set to Custom mode.

**BIOS.SysProfileSettings.PowerSaver (Read or Write)**

**Description**  
Enables or disables the enhanced System DBPM (DAPC) mode.

**Legal Values**  
- Enabled
- Disabled

**Default Value**  
Not Applicable

**Write Privilege**  
Server Control

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
Read Only if SysProfileSettings.SysProfile is not set to Custom mode.
**BIOS.SysProfileSettings.ProcTurboMode (Read or Write)**

**Description**  
When enabled, the processor can operate in Turbo Boost Mode.

**Legal Values**  
- Enabled
- Disabled

**Default Value**  
Not Applicable

**Write Privilege**  
Server Control

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
Read Only if SysProfileSettings.SysProfile is not set to Custom mode.

**BIOS.SysProfileSettings.SysProfile (Read or Write)**

**Description**  
Sets the System Profile to Performance Per Watt (DAPC), Performance Per Watt (OS) Performance Dense Configuration, or Custom mode.

**Legal Values**  
- PerfPerWattOptimizedOs
- PerfPerWattOptimizedDapc
- PerfOptimized
- Custom
- DenseCfgOptimized

**Default Value**  
Not Applicable

**Write Privilege**  
Server Control

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
None

**BIOS.SysProfileSettings.TpmCommand (Read or Write)**

**Description**  
Allows to control the Trusted Platform Module (TPM). This property is Read-Only when TPM Security is set to Off and the action requires a restart before the effect. When set to:

- None, the command is not sent to the TPM.
- Activate, the TPM is enabled and activated.
- Deactivate, the TPM is disabled and deactivated.
- Clear, all the contents of TPM is cleared. Clearing the TPM will cause loss of all keys in the TPM.

![](image)

**Legal Values**  
- None
- Activate

**NOTE:** The clearing can affect starting the operating system.
BIOS.SysProfileSettings.UncoreFrequency (Read or Write)

Description
Selects the processor uncore frequency.

Legal Values
- DynamicUFS
- MaxUFS
- MinUFS

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

BIOS.SysProfileSettings.WriteDataCrc

Description
Detects the DDR4 data bus issues and corrects during the write operation.

Legal Values
- Enabled
- Disabled

Default Value
NA

Write Privilege
Server control

License Required
RACADM

Dependency
Read only if SysProfileSettings.SysProfile is not set to Custom.

BIOS.SysSecurity

To manage the system security properties of the BIOS, use the objects in this group.

NOTE: After modifying the IntelTxt attribute value, the pending flag is enabled for the dependent attributes such as TpmActivation, TpmClear, and TpmSecurity.
BIOS.SysSecurity.AcPwrRcvry (Read or Write)

**Description**
Specifies how the system responds after AC power is restored to the system. It is useful when the system is turned off with a power strip.

**Legal Values**
- On
- Off
- Last

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Read Only if SysSecurity.AcPwrRcvry is set to Off.

BIOS.SysSecurity.AcPwrRcvryDelay (Read or Write)

**Description**
Specifies how the system supports the staggering of power-up after AC power has been restored to the system.

**Legal Values**
- Immediate
- User
- Random

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

BIOS.SysSecurity.AcPwrRcvryUserDelay (Read or Write)

**Description**
Controls the user-defined AC Recovery Delay.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
BIOS.SysSecurity.Aesni (Read or Write)

Description: Displays the status of Intel(R) Processor AES-NI feature.

Legal Values:
- Enabled
- Disabled

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

BIOS.SysSecurity.BiosUpdateControl (Read or Write)

Description: If this attribute is set to Unlocked, then all BIOS update is allowed. If set to Limited, then local BIOS updates from DOS or UEFI shell based flash utilities, or Lifecycle Controller user interface is disallowed.

Legal Values:
- Unlocked
- Limited
- Locked

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

BIOS.SysSecurity.IntelTxt (Read or Write)

Description: Enables or disables Trusted Execution technology.

**NOTE:** When the IntelTxt value is set to ‘on’, then the following values are set: TpmActivation=NoChange (Pending Value=NoChange), TpmClear=No (Pending Value=No), TpmSecurity=OnPbm (Pending Value=OnPbm).

Legal Values:
- On
- Off

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Read Only if:
• ProcSettings.ProcVirtualization is Disabled
• SysSecurity.TpmActivation is Deactivate
• SysSecurity.TpmActivation is Yes
• SysSecurity.TpmSecurity is not set to OnPbm

**BIOS.SysSecurity.NmiButton (Read or Write)**

**Description**
Enables or disables the NMI button on the front panel.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.SysSecurity.PasswordStatus (Read or Write)**

**Description**
Locks the system password.

**Legal Values**
- Locked
- Unlocked

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**BIOS.SysSecurity.PwrButton (Read or Write)**

**Description**
Enables or disables the power button on the front panel.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise
BIOS.SysSecurity.SecureBoot (Read or Write)

Description
Enables or disables the SecureBoot option.

NOTE: BiosBootSettings.Bootmode must be set to UEFI and MiscSettings.ForceInt10 must be Disabled to operate this property.

Legal Values
- Enabled
- Disabled

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

BIOS.SysSecurity.SetupPassword (Read or Write)

Description
Set up the system password. Optional parameter \(-o <\text{string}>\) is used with this object to provide old password as an authentication for changing the previously configured password to the new password.

The password can include the following:
- Up to 32 characters including whitespace.
- Contain numbers 0 through 9.
- Only lower case alphabets are accepted.
- Special characters accepted are +, *, , —, , ., /, ;, [,.], `.

To enable password modification, J_EN_PASSWD must be installed.

To clear the already configured password, use the option available under F2 (system setup) during system start.

Legal Values
String of up to 22 characters

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

BIOS.SysSecurity.SHA256SetupPassword (Read or Write)

Description
Indicates the SHA256 hash of the setup password.

Legal Values
String of 64 characters

Default Value
Not Applicable
Write Privilege  Server Control
License Required  iDRAC Express or iDRAC Enterprise
Dependency  None

**BIOS.SysSecurity.SHA256SetupPasswordSalt (Read or Write)**

Description  Indicates the Salt string added to the setup password before hash.
Legal Values  String of 32 characters
Default Value  Not Applicable
Write Privilege  Server Control
License Required  iDRAC Express or iDRAC Enterprise
Dependency  None

**BIOS.SysSecurity.SignedFirmwareUpdate (Read or Write)**

Description  Enables the signed BIOS update feature. Once enabled, this attribute cannot be disabled. When you change the value from disabled to enabled, a warning message is displayed.
Legal Values  
- Enabled
- Disabled
Default Value  Not Applicable
Write Privilege  Server Control
License Required  iDRAC Express or iDRAC Enterprise
Dependency  None

**BIOS.SysSecurity.SysPassword (Read or Write)**

Description  Provides the system password. Optional parameter \-o <string> is used with this object to provide old password as an authentication for changing the previously configured password to the new password.

The password can include the following:
- Up to 32 characters including whitespace.
- Contain numbers 0 through 9.
- Only lower case alphabets are accepted.
- Special characters accepted are *, ., \., /, :, \[, \], `.

To enable password modification, J\_EN\_PASSWD must be installed.

To clear the already configured password, use the option available under F2 (system setup) during system start.

Legal Values  String of up to 22 characters
Default Value  Not Applicable
Write Privilege  Server Control
**License Required**  IDRAC Express or iDRAC Enterprise

**Dependency**  None

**BIOS.SysSecurity.SHA256SystemPassword (Read or Write)**

**Description**  Indicates the SHA256 hash of the system password.

**Legal Values**  String of 64 characters

**Default Value**  Not Applicable

**Write Privilege**  Server Control

**License Required**  IDRAC Express or iDRAC Enterprise

**Dependency**  None

**BIOS.SysSecurity.SHA256SystemPasswordSalt (Read or Write)**

**Description**  Indicates the Salt string added to the system password before hash.

**Legal Values**  String of 32 characters

**Default Value**  Not Applicable

**Write Privilege**  Server Control

**License Required**  IDRAC Express or iDRAC Enterprise

**Dependency**  None

**BIOS.SysSecurity.TcmActivation (Read or Write)**

**Description**  Set the operational state of the Trusted Cryptography Module (TCM).

**Legal Values**
- No change
- Activate
- Deactivate

**Default Value**  Not Applicable

**Write Privilege**  Server Control

**License Required**  IDRAC Express or iDRAC Enterprise

**Dependency**  None
**BIOS.SysSecurity.TcmClear (Read or Write)**

**Description**
 Warns that clearing the TPM causes loss of all keys in the TPM. It may affect starting the operating system.

**Legal Values**
- Yes
- No

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.SysSecurity.TcmSecurity (Read or Write)**

**Description**
Controls the reporting of the Trusted Cryptography Module (TCM) in the system.

**Legal Values**
- Off
- On

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**BIOS.SysSecurity.TpmActivation (Read or Write)**

**Description**
Specify the operational state of the Trusted Platform Module (TPM).

**Legal Values**
- NoChange
- Activate
- Deactivate

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Read Only if SysSecurity.TpmSecurity is set to Off.
**BIOS.SysSecurity.TpmClear (Read or Write)**

**Description**
Warns that clearing the TPM causes loss of all keys in the TPM. It may affect starting the operating system.

**Legal Values**
- Yes
- No

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Read Only if SysSecurity.TpmSecurity is set to Off.

---

**BIOS.SysSecurity.TpmFirmware**

**Description**
Displays the firmware version of the Trusted Platform Module (TPM).

**Legal Values**
NA

**Default Value**
NA

**Write Privilege**
Server control

**License Required**
RACADM

**Dependency**
None

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**BIOS.SysSecurity.TpmPpiBypassClear**

**Description**
Clears the Physical Presence Interface (PPI) Advanced Configuration and Power Interface (ACPI) and enables the operating system to by-pass the PPI-related prompts.

**Legal Values**
- Enabled
- Disabled

**Default Value**
NA

**Write Privilege**
Server control

**License Required**
RACADM

**Dependency**
None
BIOS.SysSecurity.TpmPpiBypassProvision

Description  Enables or disables the Physical Presence Interface (PPI) Advanced Configuration and Power Interface (ACPI) and this feature enables operating system to by-pass the PPI-related prompts.

Legal Values  
- Enabled
- Disabled

Default Value  NA

Write Privilege  Server control

License Required  RACADM

Dependency  None

BIOS.SysSecurity.TpmSecurity (Read or Write)

Description  Controls the reporting of the Trusted Platform Module (TPM) in the system.

Legal Values  
- Off
- OnPbm
- OnNoPbm

Default Value  Not Applicable

Write Privilege  Server Control

License Required  iDRAC Express or iDRAC Enterprise

Dependency  None

BIOS.SysSecurity.TPMStatus (Read Only)

Description  Displays the status of TPM.

Legal Values  String of up to 64 ASCII characters.

Default Value  Not Applicable

Write Privilege  Server Control

License Required  iDRAC Express or iDRAC Enterprise

Dependency  None
BIOS.UefiBootSettings

The objects in this group manages the UEFI boot settings.

BIOS.UefiBootSettings.UefiBootSeq (Read or Write)

Description
Controls the UEFI boot order. The first option in the list is tried first. If unsuccessful, the second option is tried and so on. This property is applied only when Boot Mode is UEFI and not BIOS.

Legal Values
Enum Values

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

BIOS.UefiBootSettings.UefiPxeIpVersion (Read or Write)

Description
Enables to select the IPv4 PXE booting (default) or IPv6 PXE booting when in UEFI boot mode. This property is disabled in BIOS boot mode. If this property is modified, the PXE options in the UEFI boot sequence is replaced on the next restart.

Legal Values
• IPv4
• IPv6

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

FC.FCDevice

The objects in this group manage the FC device.

FC.FCDevice.BusDeviceFunction (Read Only)

Description
Indicates the enumerated PCI Bus, Device, and Function value as a single string.

Legal Values
Not Applicable

Default Value
Not Applicable

Write Privilege
Not Applicable

License Required
iDRAC Express or iDRAC Enterprise

Dependency
Not Applicable
### FC.FCDevice.ChipMdl (Read Only)

- **Description**: Indicates the PCI configuration space information.
- **Legal Values**: Not Applicable
- **Default Value**: Not Applicable
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Not Applicable

### FC.FCDevice.EFIVersion (Read Only)

- **Description**: Indicates the version of the EFI device driver.
- **Legal Values**: Not Applicable
- **Default Value**: Not Applicable
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Not Applicable

### FC.FCDevice.FamilyVersion (Read Only)

- **Description**: Indicates the firmware’s family version.
- **Legal Values**: Not Applicable
- **Default Value**: Not Applicable
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Not Applicable

### FC.FCDevice.PCIDeviceID (Read Only)

- **Description**: Indicates the device ID present in the PCI configuration space.
- **Legal Values**: Not Applicable
- **Default Value**: Not Applicable
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Not Applicable
**FC.FCTarget**

The objects in this group manage the Fibre Channel target.

**FC.FCTarget.BootScanSelection (Read or Write)**

**Description**
Sets the port’s operation while starting the system from Fiber Channel target(s). Only operations supported by the option-ROM should be implemented.

**Legal Values**
- Disabled
- SpecifiedLUN
- FirstLUN
- FirstLUN0
- FirstNOTLUN0
- FabricDiscovered

**Default Value**
Disabled

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Applicable

**FC.FCTarget.FirstFCTargetLUN (Read or Write)**

**Description**
Specifies the LUN (Logical Unit Number) of the first Fibre Channel boot target.

**Legal Values**
Not Applicable

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Applicable

**FC.FCTarget.SecondFCTargetLUN (Read or Write)**

**Description**
Specifies the LUN of the second Fibre Channel boot target.

**Legal Values**
Not Applicable

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Applicable
FC.FCTarget.FirstFCTargetWWPN (Read or Write)

Description
Specifies the World Wide Port Name of the first Fibre Channel boot target.

Legal Values
Not Applicable

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
Not Applicable

FC.FCTarget.SecondFCTargetWWPN (Read or Write)

Description
Specifies the World Wide Port Name (WWPN) of the second Fibre Channel boot target.

Legal Values
Not Applicable

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
Not Applicable

FC.HBACfg

The objects in this group manage the Fibre Channel Host Bus Adapter (HBA).

FC.HBACfg.FCTape (Read or Write)

Description
Enables or disables Fibre Channel Tape support.

Legal Values
- Enabled
- Disabled

Default Value
Disabled

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
Not Applicable

FC.HBACfg.FabricLoginTimeout (Read or Write)

Description
Sets the SAN Fabric login time out.

Legal Values
Not Applicable
**FC.HBACfgFabricLoginRetryCount (Read or Write)**

Description: Sets the current SAN Fabric login retry count.

Legal Values: Not Applicable

Default Value: 3

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Not Applicable

**FC.HBACfgFramePayloadSize (Read or Write)**

Description: Sets the Frame Payload Size to automatic or in bytes.

Legal Values:
- Auto
- 512
- 1024
- 2048
- 2112

Default Value: Auto

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Not Applicable

**FC.HBACfgHardZone (Read or Write)**

Description: Enables or disables the Fibre Channel hard zone.

Legal Values:
- Enabled
- Disabled

Default Value: Disabled

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Not Applicable
**FC.HBAConfig.HardZoneAddress (Read or Write)**

- **Description**
  Sets the Hard Zone address.
- **Legal Values**
  Not Applicable
- **Default Value**
  0
- **Write Privilege**
  Server Control
- **License Required**
  iDRAC Express or iDRAC Enterprise
- **Dependency**
  Not Applicable

**FC.HBAConfig.LinkDownTimeout (Read or Write)**

- **Description**
  Sets the Link down time out.
- **Legal Values**
  Not Applicable
- **Default Value**
  3000
- **Write Privilege**
  Server Control
- **License Required**
  iDRAC Express or iDRAC Enterprise
- **Dependency**
  Not Applicable

**FC.HBAConfig.LoopResetDelay (Read or Write)**

- **Description**
  Sets the arbitrated Loop Reset Delay for the port in seconds.
- **Legal Values**
  Not Applicable
- **Default Value**
  5
- **Write Privilege**
  Server Control
- **License Required**
  iDRAC Express or iDRAC Enterprise
- **Dependency**
  Not Applicable

**FC.HBAConfig.PortDownRetryCount (Read or Write)**

- **Description**
  Sets the target port down Input/Output retry count.
- **Legal Values**
  Not Applicable
- **Default Value**
  Not Applicable
- **Write Privilege**
  Server Control
- **License Required**
  iDRAC Express or iDRAC Enterprise
- **Dependency**
  Not Applicable
**FC.HBAConfig.PortDownTimeout (Read or Write)**

- **Description**: Sets the target port down time out.
- **Legal Values**: Not Applicable
- **Default Value**: 3000
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Not Applicable

**FC.HBAConfig.PortLoginRetryCount (Read or Write)**

- **Description**: Sets the target Port login retry count.
- **Legal Values**: Not Applicable
- **Default Value**: 3
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Not Applicable

**FC.HBAConfig.PortLoginTimeout (Read or Write)**

- **Description**: Sets the target port login time out.
- **Legal Values**: Not Applicable
- **Default Value**: 3000
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Not Applicable

**FC.PortConfig**

The objects in this group manage the Fiber Channel port configuration.

**FC.PortConfig.DeviceName (Read Only)**

- **Description**: Indicates the product name of the Fibre Channel host bus adapter.
- **Legal Values**: Not Applicable
- **Default Value**: Not Applicable
### FC.PortConfig.FCDDevice (Read Only)

**Description:** Displays the version of the device and firmware.

**Legal Values:** Not Applicable

**Default Value:** Not Applicable

**Write Privilege:** Not Applicable

**License Required:** iDRAC Express or iDRAC Enterprise

**Dependency:** Not Applicable

### FC.PortConfig.FCTarget (Read Only)

**Description:** Enables the connection, configure boot, and communication parameters for the Fibre Channel boot target(s).

**Legal Values:** Not Applicable

**Default Value:** Not Applicable

**Write Privilege:** Not Applicable

**License Required:** iDRAC Express or iDRAC Enterprise

**Dependency:** Not Applicable

### FC.PortConfig.HBAConfig (Read Only)

**Description:** Configures the advanced settings for adapter and port.

**Legal Values:** Not Applicable

**Default Value:** Not Applicable

**Write Privilege:** Not Applicable

**License Required:** iDRAC Express or iDRAC Enterprise

**Dependency:** Not Applicable

### FC.PortConfig.PortNumber (Read Only)

**Description:** Indicates the Fibre Channel Host Bus Adapter port number.

**Legal Values:** Not Applicable

**Default Value:** Not Applicable

**Write Privilege:** Not Applicable
**FC.PortConfig.PortSpeed (Read or Write)**

**Description**
Specifies the data rate of the Fibre Channel Host Bus Adapter port. The value can be Automatic or specified in Gbps.

**Legal Values**
- Auto
- 1G
- 2G
- 4G
- 8G
- 16G

**Default Value**
Auto

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Applicable

---

**FC.PortConfig.VirtualWWN (Read or Write)**

**Description**
Indicates the virtual Fibre Channel World Wide Node Name (WWN).

**Legal Values**
Not Applicable

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Applicable

---

**FC.PortConfig.VirtualWWPN (Read or Write)**

**Description**
Indicates the virtual Fibre Channel World Wide Port Name of the port.

**Legal Values**
Not Applicable

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Applicable
**FC.PortConfig.WWN (Read Only)**

**Description**
Indicates the permanent Fibre Channel World Wide Node name.

**Legal Values**
Not Applicable

**Default Value**
Not Applicable

**Write Privilege**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Applicable

**FC.PortConfig.WWPN (Read Only)**

**Description**
Indicates the permanent Fibre Channel World Wide Port Name assigned to the port.

**Legal Values**
Not Applicable

**Default Value**
Not Applicable

**Write Privilege**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Applicable

**NIC.ConfigureFormn**

The objects in this group manage.

**NIC.ConfigureFormn.BusDeviceFunction (Read Only)**

**Description**
Indicates the value of the bus device function.

**Legal Values**
Not Applicable

**Default Value**
Not Applicable

**Write Privilege**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Applicable

**NIC.ConfigureFormn.MacAddr (Read Only)**

**Description**
Indicates the permanent MAC address.

**Legal Values**
Not Applicable

**Default Value**
Not Applicable
NIC.ConfigureFormn.FIPMacAddr (Read Only)

Description: Indicates the permanent FIP-MAC address for FCoE.

Legal Values: Not Applicable
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: Not Applicable

NIC.ConfigureFormn.IscsiMacAddr (Read Only)

Description: Indicates the permanent MAC address for iSCSI off load.

Legal Values: Not Applicable
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: Not Applicable

NIC.ConfigureFormn.iScsiOffloadMode (Read or Write)

Description: Enables or disables the iSCSI off load on the partition.

Legal Values:
- Enabled
- Disabled

Default Value: Disabled
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: Not Applicable

NIC.ConfigureFormn.FCoEOffloadMode (Read or Write)

Description: Enables or disables the FCoE on the partition.

Legal Values:
- Enabled
NIC.ConfigureFormn.NicMode (Read or Write)

Description
Enables or disables the NIC mode on the partition.

Legal Values
- Enabled
- Disabled

Default Value
Disabled

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
Not Applicable

NIC.ConfigureFormn.PCIDeviceID (Read Only)

Description
Indicates the PCI Device ID of the partition.

Legal Values
Not Applicable

Default Value
Not Applicable

Write Privilege
Not Applicable

License Required
iDRAC Express or iDRAC Enterprise

Dependency
Not Applicable

NIC.ConfigureFormn.WWN (Read Only)

Description
Indicates the Fibre Channel World Wide Node name identifier for FCoE.

Legal Values
Not Applicable

Default Value
Not Applicable

Write Privilege
Not Applicable

License Required
iDRAC Express or iDRAC Enterprise

Dependency
Not Applicable
NIC.ConfigureFormn.WWPN (Read Only)

Description: Indicates the Fibre Channel World Wide Port Name identifier for FCoE.

Legal Values: Not Applicable
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: IDRAC Express or iDRAC Enterprise
Dependency: Not Applicable

NIC_ConfigureFormn.VirtWWN (Read or Write)

Description: Sets the Fibre Channel World Wide Node Name identifier for partition FCoE.

Legal Values: Not Applicable
Default Value: 00:00:00:00:00:00:00:00
Write Privilege: Server Control
License Required: IDRAC Express or iDRAC Enterprise
Dependency: Not Applicable

NIC_ConfigureFormn.VirtWWPN (Read or Write)

Description: Assigns the Fibre Channel World Wide Port Name identifier for partition FCoE.

Legal Values: Not Applicable
Default Value: 00:00:00:00:00:00:00:00
Write Privilege: Server Control
License Required: IDRAC Express or iDRAC Enterprise
Dependency: Not Applicable

NIC_ConfigureFormn.VirtMacAddr (Read or Write)

Description: Assigns MAC address for partition.

Legal Values: Not Applicable
Default Value: 00:00:00:00:00:00
Write Privilege: Server Control
License Required: IDRAC Express or iDRAC Enterprise
Dependency: Not Applicable
NIC_ConfigureFormn.VirtIscsiMacAddr (Read or Write)

Description: Assigns the MAC address for partition iSCSI off load.

Legal Values: Not Applicable

Default Value: 00:00:00:00:00:00

Write Privilege: Server Control

License Required: IDRAC Express or IDRAC Enterprise

Dependency: Not Applicable

NIC_ConfigureFormn.VirtFIPMacAddr (Read or Write)

Description: Assigns the FIP-MAC address for partition FCoE.

Legal Values: Not Applicable

Default Value: 00:00:00:00:00:00

Write Privilege: Server Control

License Required: IDRAC Express or IDRAC Enterprise

Dependency: Not Applicable

NIC.DCBSettings

The following section provides information about the objects in the NIC.DCBSettings group.

NIC.DCBSettings.CongestionNotification (Read Only)

Description: Indicates whether Congestion Notification capability is supported.

Legal Values: • Available • Unavailable

Default Value: Not Applicable

Write Privilege: Not Applicable

License Required: IDRAC Express or IDRAC Enterprise

Dependency: None
NIC.DCBSettings.DCBExchangeProtocol (Read Only)

Description Indicates whether Data Center Bridging (DCB) Exchange Protocol capability is supported.
Legal Values
- Available
- Unavailable
Default Value Not Applicable
Write Privilege Not Applicable
License Required iDRAC Express or iDRAC Enterprise
Dependency None

NIC.DCBSettings.EnhancedTransmissionSelection (Read Only)

Description Indicates whether Enhanced Transmission Selection capability is supported.
Legal Values
- Available
- Unavailable
Default Value Not Applicable
Write Privilege Not Applicable
License Required iDRAC Express or iDRAC Enterprise
Dependency None

NIC.DCBSettings.PriorityFlowControl (Read Only)

Description Indicates whether Priority Flow Control capability is supported.
Legal Values
- Available
- Unavailable
Default Value Not Applicable
Write Privilege Not Applicable
License Required iDRAC Express or iDRAC Enterprise
Dependency None

NIC.DeviceLevelConfig

To manage the device level configurations, use the objects in this group.
**NOTE:** To get the actual supported values for BIOS, NIC, and FC components, query the help with an index. If you query without an index, the generic help is displayed.

### NIC.DeviceLevelConfig.EVBModesSupport (Read Only)

**Description**  
Indicates the type of EVB Modes supported.

**Legal Values**
- VEB
- VEPA
- PE
- Multichannel

**Default Value**  
Not Applicable

**Write Privilege**  
Not Applicable

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
None

### NIC.DeviceLevelConfig.FlowControlSetting (Read or Write)

**Description**  
Configure type of Flow Control used.

**Legal Values**
- Auto
- TX:Send Pause on RX Overflow
- RX:Throttle TX on Pause Received
- TX RX Flow Control

**Default Value**  
Auto

**Write Privilege**  
Server Control

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
None

### NIC.DeviceLevelConfig.NParEP (Read or Write)

**Description**  
Controls the enablement of NParEP mode.

**Legal Values**
- Enabled
- Disabled

**Default Value**  
Disabled

**Write Privilege**  
Server Control

**License Required**  
iDRAC Express or iDRAC Enterprise
NIC.DeviceLevelConfig.SRIOVSupport (Read Only)

Description Indicates whether SR-IOV capability is supported.

Legal Values
- Available
- Unavailable

Default Value Not Applicable

Write Privilege Not Applicable

License Required IDRAC Express or iDRAC Enterprise

Dependency None

NOTE: For Emulex cards, the VirtualizationMode attribute is found under the VndrConfigPage group instead of the DeviceLevelConfig group.

NIC.DeviceLevelConfig.VirtualizationMode (Read or Write)

Description Specifies the type of virtualization used by the controller on all ports.

Legal Values
- NONE
- NPAR
- SRIOV
- NPARSRIOV

Default Value None

Write Privilege Server Control

License Required IDRAC Express or iDRAC Enterprise

Dependency Not Applicable

NIC.FCOECapabilities

The following section provides information about the objects in the NIC.FCOECapabilities group.

NIC.FCOECapabilities.AddressingMode (Read Only)

Description Indicates whether SPMA or FPMA addressing is used for FCoE transactions.

Legal Values
- SPMA
- FPMA

Default Value Not Applicable
Write Privilege: Not Applicable  
License Required: iDRAC Express or iDRAC Enterprise  
Dependency: None

### NIC.FCOECapabilities.MaxFrameSize (Read Only)

**Description**: Indicates the maximum frame size for each FCoE frame.

**Legal Values**: None

**Default Value**: Not Applicable

**Write Privilege**: Not Applicable

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: None

### NIC.FCOECapabilities.MaxIOsPerSession (Read Only)

**Description**: Indicates the maximum number of IOs supported per session.

**Legal Values**: None

**Default Value**: Not Applicable

**Write Privilege**: Not Applicable

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: None

### NIC.FCOECapabilities.MaxNPIVPerPort (Read Only)

**Description**: Indicates the maximum number of NPIV WWN per port.

**Legal Values**: None

**Default Value**: Not Applicable

**Write Privilege**: Not Applicable

**License Required**: iDRAC Express or iDRAC Enterprise

**Dependency**: None
### NIC.FCOECapabilities.MaxNumberExchanges (Read Only)

<table>
<thead>
<tr>
<th>Description</th>
<th>Indicates the maximum number of exchanges supported.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>None</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

### NIC.FCOECapabilities.MaxNumberLogins (Read Only)

<table>
<thead>
<tr>
<th>Description</th>
<th>Indicates the maximum number of logins supported per port.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>None</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>

### NIC.FCOECapabilities.MaxNumberOfFCTargets (Read Only)

<table>
<thead>
<tr>
<th>Description</th>
<th>Indicates the maximum number of FC targets supported.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>None</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>
**NIC.FCOECapabilities.MaxNumberOutStandingCommands (Read Only)**

**Description**
Indicates the maximum number of outstanding commands supported across all sessions.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**NIC.FCOECapabilities.MTUReconfigurationSupport (Read Only)**

**Description**
Indicates whether the MTU reconfiguration capability is supported.

**Legal Values**
- Available
- Unavailable

**Default Value**
Not Applicable

**Write Privilege**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**NIC.FCoEConfiguration**
The following section provides information about the objects in the NIC.FCoEConfiguration group.

**NIC.FCoEConfiguration.ConnectFirstFCoETarget (Read or Write)**

**Description**
Specifies whether FCoE initiator is used to connect to the first FCoE storage target defined.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Disabled
<table>
<thead>
<tr>
<th>NIC.FCoEConfiguration.BootOrderFirstFCoETarget (Read or Write)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Specifies the port's target in the FCoE boot order.</td>
</tr>
<tr>
<td><strong>Legal Values</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Default Value</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>Write Privilege</strong></td>
<td>Server Control</td>
</tr>
<tr>
<td><strong>License Required</strong></td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td><strong>Dependency</strong></td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NIC.FCoEConfiguration.BootOrderSecondFCoETarget (Read or Write)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Specifies the port's second defined target in the FCoE boot.</td>
</tr>
<tr>
<td><strong>Legal Values</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Default Value</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>Write Privilege</strong></td>
<td>Server Control</td>
</tr>
<tr>
<td><strong>License Required</strong></td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td><strong>Dependency</strong></td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NIC.FCoEConfiguration.BootOrderThirdFCoETarget (Read or Write)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Specifies the port's third defined target in the FCoE boot.</td>
</tr>
<tr>
<td><strong>Legal Values</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Default Value</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>Write Privilege</strong></td>
<td>Server Control</td>
</tr>
<tr>
<td><strong>License Required</strong></td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td><strong>Dependency</strong></td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
### NIC.FCoEConfiguration.BootOrderFourthFCoETarget (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Specifies the port's fourth defined target in the FCoE boot.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Default Value</td>
<td>0</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

### NIC.FCoEConfiguration.FirstFCoEBootTargetLUN (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>LUN of the first FCoE storage target that the FCoE initiator will start the system from when Connect attribute is enabled.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>None</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>Enable NIC.FCoEConfiguration.ConnectFirstFCoETarget</td>
</tr>
</tbody>
</table>

### NIC.FCoEConfiguration.FirstFCoEFCFVLANID (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>VLAN ID uses the first FC storage target to connect.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Values</td>
<td>None</td>
</tr>
<tr>
<td>Default Value</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Write Privilege</td>
<td>Server Control</td>
</tr>
<tr>
<td>License Required</td>
<td>iDRAC Express or iDRAC Enterprise</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
</tbody>
</table>
NIC.FCoEConfiguration.FirstFCoEWWPNTarget (Read or Write)

Description
World Wide Port Name (WWPN) of the first FCoE storage target.

Legal Values
None

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

NIC.FCoEConfiguration.MTUParams (Read or Write)

Description
Configure the MTU setting.

Legal Values
• Global
• Per DCB Priority
• Per VLAN

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

NIC.FCoEGenParams

The following section provides information about the objects in the NIC.FCoEGenParams group.

NIC.FCoEGenParams.FCoEBootScanSelection (Read or Write)

Description
Represents the adaptor behavior for starting the system from specified FCoE storage target or fabric discovered target.

Legal Values
• 0 — Disabled
• 1 — First LUN
• 2 — First LUN 0
• 3 — First LUN Not LUN 0
• 4 — Fabric Discovered LUN
NIC.FCoEGenParams.FCoEFabricDiscoveryRetryCnt (Read or Write)

Description | Retry count for FCoE fabric discovery.
Legal Values | Values: 0–60
Default Value | Not Applicable
Write Privilege | Server Control
License Required | iDRAC Express or iDRAC Enterprise
Dependency | None

NIC.FCoEGenParams.FCoEFirstHddTarget (Read or Write)

Description | Specifies whether the FCoE target is represented as the first HDD to the system.
Legal Values | • Enabled
• Disabled
Default Value | Disabled
Write Privilege | Server Control
License Required | iDRAC Express or iDRAC Enterprise
Dependency | None

NIC.FCoEGenParams.FCoELnkUpDelayTime (Read or Write)

Description | Specifies the time FCoE Initiator waits after an Ethernet link is established before sending any data over the network. Units are in seconds.
Legal Values | Values: 0–255
NIC.FCoEGenParams.FCoELunBusyRetryCnt (Read or Write)

Description: Specifies the number of connection retries the FCoE boot initiator will attempt if the FCoE target LUN is busy.

Legal Values: Values: 0–60

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

NIC.FCoEGenParams.FCoETgtBoot (Read or Write)

Description: Enables the FCoE initiator to start system to the FCoE target.

Legal Values:
- Enabled
- Disabled

Default Value: Disabled

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

NIC.FrmwImgMenu

The following section provides information about the objects in the NIC.FrmwImgMenu group.

NIC.FrmwImgMenu.ControllerBIOSVersion (Read Only)

Description: Indicates the controller BIOS version information.

Legal Values: String of up to 8 ASCII characters

Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

**NIC.FrmwImgMenu.EFIVersion (Read Only)**

Description: Indicates the EFI device driver version information.

Legal Values: String of up to 8 ASCII characters

Default Value: Not Applicable

Write Privilege: Not Applicable

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

**NIC.FrmwImgMenu.FamilyVersion (Read Only)**

Description: Indicates the firmware family version information.

Legal Values: String of up to 8 ASCII characters

Default Value: Not Applicable

Write Privilege: Not Applicable

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

**NIC.GlobalBandwidthAllocation**

The following section provides information about the objects in the NIC.GlobalBandwidthAllocation group.

**NIC.GlobalBandwidthAllocation.MaxBandwidth (Read or Write)**

Description: Set the maximum percentage of port TX bandwidth allocated to partition.

Legal Values: Values from 0 to 100

Default Value: 100

Write Privilege: Server Control
License Required: IDRAC Express or iDRAC Enterprise
Dependency: None

**NIC.GlobalBandwidthAllocation.MinBandwidth (Read or Write)**

- **Description:** Set the minimum percentage of port TX bandwidth allocated to partition.
- **Legal Values:** Values: 0–100
- **Default Value:** 25
- **Write Privilege:** Server Control
- **License Required:** IDRAC Express or iDRAC Enterprise
- **Dependency:** None

**NIC.IscsiFirstTgtParams**

The following section provides information about the objects in the NIC.IscsiFirstTgtParams group.

**NIC.IscsiFirstTgtParams.AddressingMode (Read or Write)**

- **Description:** Enables or disables the connection to the first iSCSI target.
- **Legal Values:**
  - Enabled
  - Disabled
- **Default Value:** Disabled
- **Write Privilege:** Server Control
- **License Required:** IDRAC Express or iDRAC Enterprise
- **Dependency:** Not Applicable

**NIC.IscsiFirstTgtParams.ConnectFirstTgt (Read or Write)**

- **Description:** Enables or disables connecting to the first iSCSI target.
- **Legal Values:**
  - Enabled
  - Disabled
- **Default Value:** Disabled
- **Write Privilege:** Server Control
**NIC.IscsiFirstTgtParams.FirstTgtBootLun (Read or Write)**

*Description*  
Set the first iSCSI storage target boot Logical Unit Number (LUN).

*Legal Values*  
Values: 0–18446744073709551615

*Default Value*  
Not Applicable

*Write Privilege*  
Server Control

**NIC.IscsiFirstTgtParams.FirstTgtChapId (Read or Write)**

*Description*  
Set the first iSCSI storage target Challenge-Handshake Authentication Protocol (CHAP) ID.

*Legal Values*  
String of up to 128 ASCII characters

*Default Value*  
Not Applicable

*Write Privilege*  
Server Control

**NIC.IscsiFirstTgtParams.FirstTgtChapPwd (Password)**

*Description*  
Specifies the first iSCSI storage target Challenge-Handshake Authentication Protocol (CHAP) secret (target CHAP password).

*Legal Values*  
String of up to 16 characters

*Default Value*  
Not Applicable

*Write Privilege*  
Server Control

**Database Objects With Get and Set Commands**
NIC.IscsiFirstTgtParams.FirstTgtIpAddress (Read or Write)

**Description**
Set the IP address of the first iSCSI target.

**Legal Values**
Valid IPv4 or IPv6 address

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Available if VndrConfigGroup.iSCSIBootSupport is Unavailable.

NIC.IscsiFirstTgtParams.FirstTgtIpVer (Read or Write)

**Description**
Specifies whether or not IPv4 or IPv6 network address is used for first iSCSI target.

**Legal Values**
- IPv4
- IPv6

**Default Value**
IPv4

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Applicable

NIC.IscsiFirstTgtParams.FirstTgtIscsiName (Read or Write)

**Description**
Set the iSCSI Qualified Name (IQN) of the first iSCSI storage target.

**Legal Values**
String of upto 223 ASCII characters

**NOTE:** The legal value range may be smaller than the maximum size of 223, based on the vendor configuration of the NIC cards.

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Available if VndrConfigGroup.iSCSIBootSupport is Unavailable.
**NIC.IscsiFirstTgtParams.FirstTgtTcpPort (Read or Write)**

**Description**
Set the TCP Port number of the first iSCSI target.

**Legal Values**
Values from 1 to 65535

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Available if VndrConfigGroup.iSCSIBootSupport is Unavailable.

---

**NIC.IscsiGenParams**

The following section provides information about the objects in the NIC.IscsiGenParams group.

---

**NIC.IscsiGenParams.ChapAuthEnable (Read or Write)**

**Description**
To use CHAP authentication when connecting to the iSCSI target, enable or disable the ability of the initiator.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Disabled

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

---

**NIC.IscsiGenParams.ChapMutualAuth (Read or Write)**

**Description**
Enables or disables mutual CHAP authentication between the iSCSI initiator and target.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Disabled

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise
### NIC.IscsiGenParams.DhcpVendId (Read or Write)

**Description**
Control what Vendor ID is presented to the DHCP service.

**Legal Values**
String of upto 255 ASCII characters

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Available if VndrConfigGroup.iSCSIBootSupport is Unavailable.

### NIC.IscsiGenParams.FirstHddTarget (Read or Write)

**Description**
Enables or disables to check if the iSCSI target appears as the first hard disk drive (HDD) in the system.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Disabled

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Available if VndrConfigGroup.iSCSIBootSupport is Unavailable.

### NIC.IscsiGenParams.IpAutoConfig (Read or Write)

**Description**
Controls the source of the initiator IP address DHCP or static assignment. This option is specific to IPv6.

**Legal Values**
- Enabled
- Disabled

**Default Value**
Disabled

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not Available if IscsiGenParams.IpVer is set to 'IPv4' and VndrConfigGroup.iSCSIBootSupport is Unavailable.
### NIC.IscsiGenParams.IpVer (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Controls whether IPv4 or IPv6 network addressing is used for iSCSI initiator and targets.</th>
</tr>
</thead>
</table>
| Legal Values| - Ipv4  
              - Ipv6  
              - None  |
| Default Value| Ipv4 |
| Write Privilege | Server Control |
| License Required | iDRAC Express or iDRAC Enterprise |
| Dependency | Not Available if VndrConfigGroup.iSCSIBootSupport is Unavailable. |

### NIC.IscsiGenParams.IscsiTgtBoot (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Specifies whether or not the iSCSI initiator will boot to the specified iSCSI target after connection.</th>
</tr>
</thead>
</table>
| Legal Values| - Enabled  
              - Disabled  
              - OneTimeDisabled |
| Default Value| Disabled  |
| Write Privilege | Server Control |
| License Required | iDRAC Express or iDRAC Enterprise |
| Dependency | Not Applicable |

### NIC.IscsiGenParams.IscsiViaDHCP (Read or Write)

<table>
<thead>
<tr>
<th>Description</th>
<th>Enables the acquisition of iSCSI target parameters from DHCP.</th>
</tr>
</thead>
</table>
| Legal Values| - Enabled  
              - Disabled |
| Default Value| Disabled  |
| Write Privilege | Server Control |
| License Required | iDRAC Express or iDRAC Enterprise |
| Dependency | Not Available if VndrConfigGroup.iSCSIBootSupport is Unavailable. |
NIC.IscsiGenParams.IscsiVLanId (Read or Write)

Description: Specifies the VLAN ID for iSCSI boot mode.

Legal Values: Not Applicable

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Not Applicable

NIC.IscsiGenParams.IscsiVLanMode (Read or Write)

Description: Enables or disables the Virtual LAN mode for iSCSI boot.

Legal Values:
- Enabled
- Disabled

Default Value: Disabled

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Not Applicable

NIC.IscsiGenParams.LnkUpDelayTime (Read or Write)

Description: Set the time to allow for link to establish before driver initialization.

Legal Values: Values from 0 to 255

Default Value: 0

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Not Available if VndrConfigGroup.iSCSIBootSupport is Unavailable.

NIC.IscsiGenParams.LunBusyRetryCnt (Read or Write)

Description: Specifies the number of connection attempts the iSCSI boot initiator will attempt if the iSCSI target LUN is busy.

Legal Values: Values: 0–60

Default Value: Not Applicable
NIC.IscsiGenParams.TcplpViaDHCP (Read or Write)

Description: Setting to enable acquisition of IPv4 TCP/IP parameters from DHCP.

Legal Values:
- Enabled
- Disabled

Default Value: Disabled

Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: Not Available if VndrConfigGroup.iSCSIBootSupport is Unavailable.

NIC.IscsiGenParams.TcpTimestamp (Read or Write)

Description: Enables or disables use of TCP timestamps in network packets as defined in RFC 1323.

Legal Values:
- Enabled
- Disabled

Default Value: Disabled

Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: Not Available if IscsiGenParams.IpVer is set to 'IPv6' and VndrConfigGroup.iSCSIBootSupport is Unavailable.

NIC.IscsiGenParams.WinHbaBootMode (Read or Write)

Description: When enabled, it enables iSCSI Offload HBA start mode and disables iSCSI software initiator boot.

Legal Values:
- Enabled
- Disabled

Default Value: Disabled
NIC.IscsiInitiatorParams

The following section provides information about the objects in the NIC.IscsiInitiatorParams group.

NIC.IscsiInitiatorParams.IscsiInitiatorChapId (Read or Write)

Description
Set the iSCSI initiator Challenge-Handshake Authentication Protocol (CHAP) ID.

Legal Values
String of up to 128 characters

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

NIC.IscsiInitiatorParams.IscsiInitiatorChapPwd (Read or Write)

Description
Set the iSCSI initiator Challenge-Handshake Authentication Protocol (CHAP) secret (password).

Legal Values
String of 12–16 characters

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

NIC.IscsiInitiatorParams.IscsiInitiatorGateway (Read or Write)

Description
Specifies the Default Gateway of the iSCSI initiator.

Legal Values
String of 2-39 characters (Ipv4 or Ipv6 gateway)

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise
### NIC.IscsilInitiatorParams.IscsilInitiatorIpAddr (Read or Write)

**Description**
Specifies the IP address of the iSCSI initiator.

**Legal Values**
String of 2–39 characters (Ipv4 or Ipv6 address)

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

### NIC.IscsilInitiatorParams.IscsilInitiatorName (Read or Write)

**Description**
Specifies the initiator iSCSI Qualified Name (IQN).

**Legal Values**
String of upto 223 characters

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

### NIC.IscsilInitiatorParams.IscsilInitiatorPrimDns (Read or Write)

**Description**
Specifies the Primary DNS IP address of the iSCSI initiator.

**Legal Values**
String of 2–39 characters (Ipv4 or Ipv6 gateway)

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.
NIC.IscsiInitiatorParams.IscsiInitiatorSecDns (Read or Write)

Description: Specifies the Secondary DNS IP address of the iSCSI initiator.

Legal Values: String of 2–39 characters (Ipv4 or Ipv6 gateway)

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

NIC.IscsiInitiatorParams.IscsiInitiatorSubnet (Read or Write)

Description: Specifies the IPv4 Subnet Mask of the iSCSI initiator.

Legal Values: String of 7–15 characters (IPv4 Subnet)

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

NIC.IscsiInitiatorParams.IscsiInitiatorSubnetPrefix (Read or Write)

Description: Specifies the IPv6 Subnet Mask Prefix of the iSCSI initiator.

Legal Values: String of 2–39 characters (IPv6 Subnet)

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

NIC.IscsiSecondaryDeviceParams

The following section provides information about the objects in the NIC.IscsiSecondaryDeviceParams group.
NIC.IscsiSecondaryDeviceParams.SecondaryDeviceMacAddr (Read or Write)

- **Description**: Specifies the MAC address of a secondary iSCSI boot adapter for redundancy in case if start is unsuccessful.
- **Legal Values**: String of up to 17 characters
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

NIC.IscsiSecondaryDeviceParams.UseIndTgtName (Read or Write)

- **Description**: Specifies whether to use Independent Target Name when multipath I/O is enabled.
- **Legal Values**: • Enabled • Disabled
- **Default Value**: Disabled
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

NIC.IscsiSecondaryDeviceParams.UseIndTgtPortal (Read or Write)

- **Description**: Specifies whether to use Independent Target Portal when multipath I/O is enabled.
- **Legal Values**: • Enabled • Disabled
- **Default Value**: Disabled
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
NIC.IscsiSecondTgtParams

To configure the iSCSI second storage, use the objects in this group.

NIC.IscsiSecondTgtParams.ConnectSecondTgt (Read or Write)

Description
Enables connecting to the second iSCSI target.

Legal Values
- Enabled
- Disabled

Default Value
Disabled

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

NIC.IscsiSecondTgtParams.SecondTgtBootLun (Read or Write)

Description
Specifies the second iSCSI storage target boot Logical Unit Number (LUN).

Legal Values
Values: 0–18446744073709551615

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

NIC.IscsiSecondTgtParams.SecondTgtChapId (Read or Write)

Description
Specifies the second iSCSI storage target Challenge-Handshake Authentication Protocol (CHAP) ID

Legal Values
Values: 0–128.

Default Value
Not Applicable

Write Privilege
Server Control
**NIC.IscsiSecondTgtParams.SecondTgtChapPwd (Read or Write)**

**Description**
Specifies the second iSCSI storage target Challenge-Handshake Authentication Protocol (CHAP) secret (target CHAP password).

**Legal Values**
String of 12–16 characters

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
IDRAC Express or iDRAC Enterprise

**Dependency**
Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

**NIC.IscsiSecondTgtParams.SecondTgtIpAddress (Read or Write)**

**Description**
Specifies the IP address of the second iSCSI target.

**Legal Values**
String of 2-39 characters (Ipv4 or Ipv6 address)

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
IDRAC Express or iDRAC Enterprise

**Dependency**
Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

**NIC.IscsiSecondTgtParams.SecondTgtIpVer (Read or Write)**

**Description**
Specifies whether or not IPv4 or IPv4 network address is used for the second iSCSI target.

**Legal Values**
- IPv4
- IPv6

**Default Value**
IPv4

**Write Privilege**
Server Control

**License Required**
IDRAC Express or iDRAC Enterprise

**Dependency**
Not Applicable
NIC.IscsiSecondTgtParams.SecondTgtIscsiName (Read or Write)

Description
Specifies the iSCSI Qualified Name (IQN) of the second iSCSI storage target.

Legal Values
String of up to 223 characters

NOTE: The legal value range may be smaller than the maximum size of 223, based on the vendor configuration of the NIC cards.

Default Value Not Applicable
Write Privilege Server Control
License Required iDRAC Express or iDRAC Enterprise
Dependency Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

NIC.IscsiSecondTgtParams.SecondTgtTcpPort (Read or Write)

Description
Specifies the TCP Port number of the second iSCSI target.

Legal Values
Values: 1–65535

Default Value Not Applicable
Write Privilege Server Control
License Required iDRAC Express or iDRAC Enterprise
Dependency Not available if VndrConfigGroup.iSCSIBootSupport is unavailable.

NIC.NICConfig

To configure the NICConfig properties, use the objects in this group.

NIC.NICConfig.BannerMessageTimeout (Read or Write)

Description
Specifies the number of seconds that the OptionROM banner is displayed during POST.

Legal Values Not Applicable
Default Value Not Applicable
Write Privilege Server Control
License Required iDRAC Express or iDRAC Enterprise
Dependency Not Applicable
NIC.NICConfig.BootOptionROM (Read or Write)

Description
Controls the enablement of legacy Boot Protocols in the Option ROM.

Legal Values
- Enabled
- Disabled

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
Not Applicable

NIC.NICConfig.BootRetryCnt (Read or Write)

Description
Specifies the number of attempts when the start is unsuccessful.

Legal Values
- NoRetry
- 1Retry
- 2Retries
- 3Retries
- 4Retries
- 5Retries
- 6Retries
- IndefiniteRetries

Default Value
NoRetry

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
Not Applicable

NIC.NICConfig.BootStrapType (Read or Write)

Description
Specifies the boot strap method used to start the operating system.

Legal Values
- AutoDetect
- BBS
- Int18h
- Int19h

Default Value
AutoDetect

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise
NIC.NICConfig.HideSetupPrompt (Read or Write)

Description: Enables or disables the option ROM setup prompt during Power On Self Test (POST).

Legal Values:
- Enabled
- Disabled

Default Value: Disabled

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: Not Applicable

NIC.NICConfig.LegacyBootProto (Read or Write)

Description: Select a non-UEFI network start protocol.

Legal Values:
- PXE
- iSCSI
- FCoE
- NONE
- iSCSI Primary
- iSCSI Secondary

Default Value: None

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

NIC.NICConfig.LnkSpeed (Read or Write)

Description: Specifies the port speed used for the selected boot protocol.

Legal Values:
- AutoNeg
- 10 Mbps Half
- 10 Mbps Full
- 100 Mbps Half
- 100 Mbps Full

Default Value: Not Applicable
**NIC.NICConfig.NumberVFAdvertised (Read or Write)**

- **Description**: Indicates the number of PCI Virtual Functions advertised on the port when SR-IOV is enabled.
- **Legal Values**: Not Applicable
- **Default Value**: 0
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: Not Applicable

**NIC.NICConfig.VLanId (Read or Write)**

- **Description**: Specifies the ID (tag) for the VLAN Mode.
- **Legal Values**: Values: 1–4095
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: VLANMode must be enabled.

**NIC.NICConfig.VLanMode (Read or Write)**

- **Description**: Virtual LAN mode enables use of a VLAN tag to use vendor-defined boot protocols.
- **Legal Values**:  • Enabled  • Disabled
- **Default Value**: Disabled
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None
NIC.NICConfig.WakeOnLan (Read or Write)

Description
Enables the server to be powered on using an in-band magic packet.

Legal Values
- Enabled
- Disabled

Default Value
Not Applicable

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

NIC.NICConfig.WakeOnLanLnkSpeed (Read or Write)

Description
Select the port speed used for Wake on LAN mode.

Legal Values
- AutoNeg
- 10 Mbps Half
- 10 Mbps Full
- 100 Mbps Half
- 100 Mbps Full

Default Value
AutoNeg

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

NIC.NICPartitioningConfig

To configure the NICPartitioning properties, use the objects in this group.

NIC.NICPartitioningConfig.NicPartitioning (Read or Write)

Description
Enables or disables NIC partitioning for all device ports.

Legal Values
- Enabled
- Disabled

Default Value
Disabled
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

NIC_NICPartitioningConfig.PartitionState (Read Only)
Description: Indicates the current enablement state of the partition.
Legal Values:
- Enabled
- Disabled
Default Value: Enabled
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: Not Applicable

NIC_NICPartitioningConfig.ConfigureFormn (Read Only)
Description: Configures the partition functionality and display the assigned address.
Legal Values: Not Applicable
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: Not Applicable

NIC.NICPartitioningConfig.NumberPCIEFunctionsEnabled (Read Only)
Description: Indicates the number of physical PCIe functions currently enabled on this port.
Legal Values: Values: 1–65535
Default Value: Not Applicable
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None
NIC.NICPartitioningConfig.NumberPCIEFunctionsSupported (Read Only)

**Description**
Indicates the number of physical PCIe functions supported on this port.

**Legal Values**
Values: 1–65535

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

NIC.VndrConfigGroup

The objects in this group manage the vendor configuration settings.

NIC.VndrConfigGroup.BusDeviceFunction (Read Only)

**Description**
Indicates the BIOS assigned PCIe.

**Legal Values**
String of up to 8 characters

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

NIC.VndrConfigGroup.BInkLeds (Read or Write)

**Description**
Identifies the physical network port by blinking the associated LED.

**Legal Values**
Values: 0–15

**Default Value**
15

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
NIC.VndrConfigGroup.ChipMdl (Read Only)

**Description**
Indicates the chip type or revision.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

NIC.VndrConfigGroup.EnergyEfficientEthernet (Read Only)

**Description**
Indicates whether Energy Efficient Ethernet capability is supported.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

NIC.VndrConfigGroup.DCBXSupport (Read Only)

**Description**
Indicates whether Data Center Bridging (DCB) capability is supported.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

NIC.VndrConfigGroup.DeviceName (Read Only)

**Description**
Official product name of the device.

**Legal Values**
Not Applicable
NIC.VndrConfigGroup.FCoEBootSupport (Read Only)

Description: Indicates whether Fibre Channel over Ethernet Boot capability is supported.

Legal Values: None

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

NIC.VndrConfigGroup.FCoEOffloadMode (Read or Write)

Description: Enables or disables FCoE personality on the port.

Legal Values:
- Enabled
- Disabled

Default Value: Disabled

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

NIC.VndrConfigGroup.FCoEOffloadSupport (Read Only)

Description: Indicates whether FCoE Offload capability is supported.

Legal Values: None

Default Value: Not Applicable

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None
NIC.VndrConfigGroup.FeatureLicensingSupport (Read Only)

- **Description**: Indicates whether Dell Feature Licensing capability is supported.
- **Legal Values**: None
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

NIC.VndrConfigGroup.FIPMacAddr (Read Only)

- **Description**: Permanent FIP-MAC address for FCoE assigned during manufacturing.
- **Legal Values**: String of up to 17 characters
- **Default Value**: Not Applicable
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

NIC.VndrConfigGroup.FlexAddressing (Read Only)

- **Description**: Indicates whether Dell FlexAddressing feature is supported.
- **Legal Values**: None
- **Default Value**: Not Applicable
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

NIC.VndrConfigGroup.iSCSIBootSupport (Read Only)

- **Description**: Indicates whether iSCSI Boot capability is supported.
- **Legal Values**: None
- **Default Value**: Not Applicable
NIC.VndrConfigGroup.ISCSIIMacAddr (Read Only)

Description: Indicates the permanent MAC address for iSCSI offload assigned during manufacturing.

Legal Values: None

Default Value: Not Applicable

Write Privilege: Not Applicable

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

NIC.VndrConfigGroup.iSCSIOffloadMode (Read or Write)

Description: Enables or disables iSCSI offload personality on the port.

Legal Values:
- Enabled
- Disabled

Default Value: Disabled

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

NIC.VndrConfigGroup.iSCSIOffloadSupport (Read Only)

Description: Indicates whether iSCSI Offload capability is supported.

Legal Values: None

Default Value: Not Applicable

Write Privilege: Not Applicable

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None
NIC.VndrConfigGroup.LinkStatus (Read Only)

Description: Indicates the physical network link status that reports the controller.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

NIC.VndrConfigGroup.MacAddr (Read Only)

Description: Indicates the permanent MAC address assigned during manufacturing.
Legal Values: String of up to 17 characters
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

NIC.VndrConfigGroup.NicMode (Read or Write)

Description: Enables or disables NIC personality on the port.
Legal Values: Enabled, Disabled
Default Value: Enabled
Write Privilege: Server Control
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None
NIC.VndrConfigGroup.NicPartitioningSupport (Read Only)

Description: Indicates whether NIC Partitioning capability is supported.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

NIC.VndrConfigGroup.NWManagementPassThrough (Read Only)

Description: Indicates whether the Network Management Pass-Through capability is supported.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

NIC.VndrConfigGroup.OnChipThermalSensor (Read Only)

Description: Indicates whether an on-chip thermal sensor is available.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None
NIC.VndrConfigGroup.OSBMCManagementPassThrough (Read Only)

Description: Indicates whether OS-BMC Management Pass Through capability is supported.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

NIC.VndrConfigGroup.PCIDeviceID (Read Only)

Description: Indicates the PCI Device ID of the port.
Legal Values: String of up to 4 characters
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

NIC.VndrConfigGroup.PXEBootSupport (Read Only)

Description: Indicates whether PXE Boot capability is supported.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

NIC.VndrConfigGroup.RemotePHY (Read Only)

Description: Indicates whether RemotePHY capability is supported.
Legal Values: None
NIC.VndrConfigGroup.RXFlowControl (Read Only)

Description: Indicates whether Receive (RX) Flow control capability is supported.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

NIC.VndrConfigGroup.TOESupport (Read Only)

Description: Indicates whether TCP/IP Offload Engine capability is supported.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None

NIC.VndrConfigGroup.TXBandwidthControlMaximum (Read Only)

Description: Indicates whether Transmit (TX) Bandwidth Control Maximum capability is supported.
Legal Values: None
Default Value: Not Applicable
Write Privilege: Not Applicable
License Required: iDRAC Express or iDRAC Enterprise
Dependency: None
**NIC.VndrConfigGroup.TXBandwidthControlMinimum (Read Only)**

- **Description**: Indicates whether Transmit (TX) Bandwidth Control Minimum capability is supported.
- **Legal Values**: None
- **Default Value**: Not Applicable
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

**NIC.VndrConfigGroup.TXFlowControl (Read Only)**

- **Description**: Indicates whether Transmit (TX) Flow Control capability is supported.
- **Legal Values**: None
- **Default Value**: Not Applicable
- **Write Privilege**: Not Applicable
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None

**NIC.VndrConfigGroup.VirtFIPMacAddr (Read or Write)**

- **Description**: Programmatically assignable FIP-MAC address for FCoE. Programmatic write for support of I/O Identity feature.
- **Legal Values**: String of up to 17 characters
- **Default Value**: Not Applicable
- **Write Privilege**: Server Control
- **License Required**: iDRAC Express or iDRAC Enterprise
- **Dependency**: None
**NIC.VndrConfigGroup.VirtIscsiMacAddr (Read or Write)**

**Description**
Programmatically assignable MAC address for iSCSI offload. Programmatic write for support of I/O Identity feature.

**Legal Values**
String of up to 17 characters

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**NIC.VndrConfigGroup.VirtMacAddr (Read or Write)**

**Description**
Programmatically assignable MAC address. Programmatic write for support of I/O Identity feature.

**Legal Values**
String of up to 17 characters

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**NIC.VndrConfigGroup.VirtualLinkControl (Read or Write)**

**Description**
Indicates whether Virtual Link Control capability is supported.

**Legal Values**
None

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

---

**NIC.VndrConfigGroup.VirtWWN (Read or Write)**

**Description**
Programmatically assignable Fibre Channel World Wide Node Name identifier for FCoE.

**Legal Values**
String of up to 23 characters
**Default Value** Not Applicable

**Write Privilege** Server Control

**License Required** iDRAC Express or iDRAC Enterprise

**Dependency** None

### NIC.VndrConfigGroup.VirtWWPN (Read or Write)

**Description** Programmatically assignable Fibre Channel World Wide Port Name identifier for FCoE.

**Legal Values** String of up to 23 characters

**Default Value** Not Applicable

**Write Privilege** Server Control

**License Required** iDRAC Express or iDRAC Enterprise

**Dependency** None

### NIC.VndrConfigGroup.WWN (Read Only)

**Description** Fibre Channel World Wide Node Name identifier for FCoE.

**Legal Values** String of up to 23 characters

**Default Value** Not Applicable

**Write Privilege** Not Applicable

**License Required** iDRAC Express or iDRAC Enterprise

**Dependency** None

### NIC.VndrConfigGroup.WWPN (Read Only)

**Description** Fibre Channel World Wide Port Name identifier for FCoE.

**Legal Values** String of up to 23 characters

**Default Value** Not Applicable

**Write Privilege** Not Applicable

**License Required** iDRAC Express or iDRAC Enterprise

**Dependency** None
Storage.Controller

The objects in this group manage storage controller attributes. This group is indexed.

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

Storage.Controller.BackgroundInitializationRate (Read or Write)

Description
The Background Initialization (BGI) rate is the percentage of the system's resources dedicated to perform the background initialization of a virtual disk after it is created.

Legal Values
Values: 0–100

Default value
100

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

Storage.Controller.BatteryLearnMode (Read Only)

Description
Battery Learn Mode controls a RAID controller's Battery Learn Cycle.

Legal Values
- Automatic
- Warn
- Disabled
- Not Supported

Default value
None

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
A battery must be present on the controller.

Storage.Controller.CheckConsistencyMode (Read or Write)

Description
Check Consistency feature is used to verify the accuracy of the redundant (parity) information.

Legal Values
- Normal
- Stop On Error

Default value
Normal

Write Privilege
Server Control

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None
Storage.Controller.CheckConsistencyRate (Read or Write)

Description: The Check Consistency rate is the percentage of the system's resources dedicated to performing a check consistency on a redundant virtual disk.

Legal Values: Values: 0–100
Default value: 100
Write Privilege: Server Control
License Required: IDRAC Express or iDRAC Enterprise
Dependency: None

Storage.Controller.ControllerBootMode (Read or Write)

Description: This property indicates the Controller Boot Mode setting on the controller.

Legal Values:  
- User Mode  
- Continue Boot On Error  
- Headless Mode Continue On Error  
- Headless Safe Mode

Default Value: Not Applicable
Write Privilege: Server Control
License Required: IDRAC Express or iDRAC Enterprise
Dependency: None

Storage.Controller.CopybackMode (Read or Write)

Description: This attribute represents the mode of restoring the configuration of a virtual disk when a failed physical disk drive is replaced in an array.

Legal Values:  
- On  
- ON with SMART  
- Off

Default value: On
Write Privilege: Server Control
License Required: IDRAC Express or iDRAC Enterprise
Dependency: None

Storage.Controller.CurrentControllerMode (Read Only)

Description: Indicates the current personality mode of controllers.

Legal Values:  
- RAID
**Storage.Controller.EnhancedAutoImportForeignConfig (Read or Write)**

**Description**
This property indicates the Enhanced Auto Import of Foreign Configuration setting on the controller.

**Legal Values**
- Disabled
- Enabled

**Default Value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**Storage.Controller.PatrolReadMode (Read or Write)**

**Description**
Patrol Read is a feature for identifying disk errors to avoid disk failures and data loss or corruption. The Patrol Read only runs on the disks that are used in a virtual disk or that are hot-spare.

**Legal Values**
- Automatic
- Manual
- Disabled

**Default value**
Automatic

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**Storage.Controller.PatrolReadRate (Read or Write)**

**Description**
The Patrol Read Rate is the percentage of the system's resources dedicated to perform Patrol Read.

**Legal Values**
Values: 0–100

**Default value**
30

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
**Description**  
Enables or disables the patrol read in non-configured areas.

**Legal Values**  
- Disabled  
- Enabled

**Default value**  
Disabled

**Write Privilege**  
Server Control

**License Required**  
RACADM

**Dependency**  
None

---

**Description**  
This attribute represents the ability to automatically use both controller ports connected to the same enclosure to route I/O requests.

**Legal Values**  
- Automatic  
- Disabled

**Default value**  
Automatic

**Write Privilege**  
Server Control

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
None

---

**Description**  
The Rebuild Rate is the percentage of the system's resources dedicated to rebuilding a failed disk when a rebuild is necessary.

**Legal Values**  
Values: 0–100

**Default value**  
100

**Write Privilege**  
Server Control

**License Required**  
iDRAC Express or iDRAC Enterprise

**Dependency**  
None

---

**Description**  
The Reconstruct Rate is the percentage of the system's resources dedicated to reconstructing a disk group after adding a physical disk drive or changing the RAID level of a virtual disk residing on the disk group.

**Legal Values**  
Values: 0–100
**Storage.Controller.RequestedControllerMode (Read or Write)**

**Description**
Modifies the controller mode to RAID or HBA.

**Legal Values**
- None
- RAID
- HBA
- Not Supported

**Default value**
Not Applicable

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**Storage.Controller.SupportControllerBootMode (Read Only)**

**Description**
This is read only attribute. This property indicates if this controller supports setting of controller boot mode.

**Legal Values**
- Supported
- Not Supported

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

**Storage.Controller.SupportEnhancedAutoForeignImport (Read Only)**

**Description**
This is a read only attribute. This property indicates if this controller supports enhanced auto import of foreign configurations.

**Legal Values**
- Supported
- Not Supported

**Default Value**
Not Applicable

**Write Privilege**
Configure iDRAC

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None
Storage.Controller.SupportRAID10UnevenSpans (Read Only)

Description
This is a read-only attribute. This property indicates if this controller supports uneven spans for RAID 10.

Legal Values
- Supported
- Not Supported

Default Value
Not Applicable

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

Storage.Controller.T10PICapability (Read Only)

Description
This is a read-only attribute. This property indicates if this controller supports T10 PI.

Legal Values
- Incapable
- Capable

Default Value
Not Applicable

Write Privilege
Configure iDRAC

License Required
iDRAC Express or iDRAC Enterprise

Dependency
None

Storage.enclosure

The objects in this group manage the storage enclosure attributes. This group is indexed.

Storage.enclosure.BackplaneCurrentMode (Read Only)

Description
Displays the current mode of the backplane.

Legal Values
- UnifiedMode
- SplitMode
- SplitMode–4:20
- SplitMode–8:16
- SplitMode–16:8
- SplitMode–20:4
- Not Applicable
- None

Default Value
UnifiedMode

Write Privilege
Not Applicable

License Required
RACADM
Storage.enclosure.BackplaneRequestedMode (Read or Write)

**Description**
Configures the backplane mode.

**Legal Values**
- UnifiedMode
- SplitMode
- SplitMode–4:20
- SplitMode–8:16
- SplitMode–16:8
- SplitMode–20:4
- Not Applicable
- None

**Default Value**
UnifiedMode

**Write Privilege**
Server Control

**License Required**
RACADM

**Dependency**
Backplane must support.

Storage.enclosure.BackplaneType (Read Only)

**Description**
Indicates whether or not the backplane is shared.

**Legal Values**
- Shared
- Non-Shared

**Default Value**
Non-Shared

**Write Privilege**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
Backplane must support.

Storage.PhysicalDisk

The objects in this group manage storage physical disk drive attributes. This group is indexed.

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

Storage.PhysicalDisk.BlockSizeInBytes (Read Only)

**Description**
This is a read-only attribute. This property indicates the logical block size of the physical drive that this virtual disk belongs to.

**Legal Values**
Values: 512 or 4096

**Default value**
Not Applicable

**Write Privilege**
Not Applicable
License Required  
iDRAC Express or iDRAC Enterprise
Dependency  
None

Storage.PhysicalDisk.MaxCapableSpeed (Read Only)

Description  
This is a read-only attribute. The property represents the data transfer speed that the disk is capable of.

Legal Values  
- Unknown
- 1.5GBPS
- 3GBPS
- 6GBPS
- 12GBPS

Default value  
Not Applicable
Write Privilege  
Not Applicable
License Required  
iDRAC Express or iDRAC Enterprise
Dependency  
None

Storage.PhysicalDisk.RaidNominalMediumRotationRate (Read Only)

Description  
This is a read-only attribute and represents the nominal medium rotation speed of a physical disk drive.

Legal Values  
Values: 2–4294967295

Default value  
Not Applicable
Write Privilege  
Not Applicable
License Required  
iDRAC Express or iDRAC Enterprise
Dependency  
None

Storage.PhysicalDisk.T10PICapability (Read Only)

Description  
This is a read-only attribute. This property indicates if this physical disk drive supports T10 PI.

Legal Values  
- Incapable
- Capable

Default value  
Not Applicable
Write Privilege  
Not Applicable
License Required  
iDRAC Express or iDRAC Enterprise
Dependency  
None

Storage.VirtualDisk

The objects in this group manage storage virtual disk attributes. This group is indexed.
The following section provides information about the objects in this group.

### Storage.VirtualDisk.BlockSizeInBytes (Read Only)

**Description**
This is a read-only attribute. This property indicates the logical block size of the physical drive that this virtual disk belongs to.

**Legal Values**
Values: 512 or 4096

**Default value**
Not Applicable

**Write Privilege**
Not Applicable

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### Storage.VirtualDisk.DiskCachePolicy (Read or Write)

**Description**
Set the physical disk drive caching policy of all members of a Virtual Disk by enabling the Disk Cache Policy. When this feature is enabled, the physical disk drive writes data to the physical disk drive cache before writing it to the physical disk drive. Because it is faster to write data to the cache than to a disk, enabling this feature can improve system performance.

**Legal Values**
- Default
- Enabled
- Disabled

**Default value**
Default

**Write Privilege**
Server Control

**License Required**
iDRAC Express or iDRAC Enterprise

**Dependency**
None

### Storage.VirtualDisk.ReadPolicy (Read or Write)

**Description**
The read policies indicate whether or not the controller must read sequential sectors of the virtual disk when seeking data.

**NOTE:** Storage.VirtualDisk.ReadPolicy attribute is read-only for few PERCs—for example, H330.

**Legal Values**
- No Read Ahead
- Read Ahead

**NOTE:** Previous generations of PERC controllers support read policy settings of No Read Ahead, Read Ahead, and Adaptive Read Ahead. With PERC 8 and PERC 9, the Read Ahead and Adaptive Read Ahead settings are functionally equivalent at the controller level. For backward compatibility purposes, some systems management interfaces and PERC 8 and 9 controllers still allow setting the read policy to Adaptive Read Ahead. While it is possible to set Read Ahead or Adaptive Read Ahead on PERC 8 or PERC 9, there is no functional difference.

**Default value**
Adaptive

**Write Privilege**
Server Control
Storage.VirtualDisk.T10PIStatus (Read or Write)

Description: This property indicates if T10 PI is enabled or disabled on this virtual disk.

NOTE: Can be disabled only if the current value for this object is enabled.

Legal Values:
- 0 — Disabled
- 1 — Enabled

Default value: 0 — Disabled

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None

Storage.VirtualDisk.WritePolicy (Read or Write)

Description: The write policies specify whether or not the controller sends a write-request completion signal as soon as the data is in the cache or after it has been written to disk.

NOTE: Storage.VirtualDisk.WritePolicy attribute is read-only for few PERCs—for example, H330.

Legal Values:
- Write Through
- Write Back
- Force Write Back

Default value: Write Back

Write Privilege: Server Control

License Required: iDRAC Express or iDRAC Enterprise

Dependency: None
## Deprecated and New Subcommands

The following table provides the list of deprecated subcommands and equivalent new subcommands.

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<th>New Subcommands</th>
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<td>config</td>
<td>set</td>
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<td>getusvcversion</td>
<td>getversion</td>
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<tr>
<td>raid</td>
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</table>

**NOTE:** The following attributes are obsoleted and these attributes do not support the ipBlocking feature:

- ipBlockingEnabled
- ipBlockingFailCount
- ipBlockingFailWindow
- ipBlockingPenaltyTime
## Legacy and New Groups and Objects

The following table provides the list of legacy groups and objects and equivalent groups and objects.

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<td>cfgADDomainController2</td>
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<td>New Groups and Objects</td>
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<td>Legacy Groups and Objects</td>
<td>New Groups and Objects</td>
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<td><strong>cfgServerInfo</strong></td>
<td><strong>iDRAC.ServerBoot</strong></td>
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<td>cfgServerBootOnce</td>
<td>BootOnce</td>
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<tr>
<td>cfgServerFirstBootDevice</td>
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</table>
**Legacy Groups and Objects**

<table>
<thead>
<tr>
<th>Object Name</th>
<th>New Groups and Objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>cfgLogging</td>
<td>iDRAC.SNMP.Alert</td>
</tr>
<tr>
<td>cfgLoggingSELOEMEventFilterEnable</td>
<td>SELOEMEventFilterEnable</td>
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<tr>
<td>cfgIpmiPetAlertEnable</td>
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<td>cfgIpmiPetAlertDestIpAddr</td>
<td>DestAddr</td>
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</tbody>
</table>

---

**cfgSSADRoleGroupPrivilege (Read or Write)**

**Description**

Use the bit mask numbers listed in the table below to set role-based authority privileges for a Role Group.

**Legal Values**

- For iDRAC: 0x00000000 to 0x000001ff

**Default**

<blank>

**Example**

```bash
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>
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</tbody>
</table>