iDRAC 8/7 v2.40.40.40 RACADM CLI Guide

October 2016
Rev. A02

Notes, cautions, and warnings

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

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

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

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Introduction

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:

- What's new in this release
- Supported RACADM Interfaces
- RACADM Syntax Usage
- Supported RACADM Subcommands
- Other Documents You May Need
- Accessing support content from the Dell EMC support site
- Contacting Dell

What's new in this release

- Added `idrac.webserver.TLSProtocol (Read or Write)` attribute to support TLS protocol.
- Added `FIPSmode – iDRAC.security` attribute to enable or disable the FIPS mode.
- Added support for enhanced Lifecycle Controller logging. If you initiate configuration using remote RACADM CLI or iDRAC web interface, the Lifecycle log displays information about the user, interface used, and the IP address of the system from which you initiate the job.

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

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

```
racadm -r <racIPAddr> -u username -p password getconfig -g <group name> -o <object name>
```

```
racadm <subcommand>
```

Example

```
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

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

Example

```
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:

```
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

```
racadm get nic.nicconfig
NIC.nicconfig.1 [Key=NIC.Integrated.1-1-1#nicconfig]
NIC.nicconfig.2 [Key=NIC.Integrated.1-2-1#nicconfig]
NIC.nicconfig.3 [Key=NIC.Integrated.1-3-1#nicconfig]
NIC.nicconfig.4 [Key=NIC.Integrated.1-4-1#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:

Table 1. RACADM Command Options

Option	Description
`-r <racIpAddr>` `-r <racIpAddr> : <port number>`	Specifies the controller's remote IP address. Use `<port number>` if the iDRAC port number is not the default port (443).
`-u <username>`	Specifies the user name that is used to authenticate the command transaction. If the `-u` option is used, the `-p` option must be used, and the `-i` option (interactive) is not allowed.
`-p <password>`	Specifies the password used to authenticate the command transaction. If the `-p` option is used, the `-i` option is not allowed.
`--nocertwarn`	Does not display certificate related warning message.

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

Subcommand	iDRAC on Blade Servers		
	Telnet/SSH/ Serial	Local RACADM	Remote RACADM
autoupdatescheduler	Yes	Yes	Yes
arp	Yes	Yes	Yes
clearasrscreen	Yes	Yes	Yes
clearpending	Yes	Yes	Yes
closessn	Yes	Yes	Yes
clrsel	Yes	Yes	Yes
config	Yes	Yes	Yes
coredump	Yes	Yes	Yes
coredumpdelete	Yes	Yes	Yes
diagnostics	Yes	Yes	Yes
eventfilters	Yes	Yes	Yes
fcstatistics	Yes	Yes	Yes
frontpanelerror	Yes	Yes	Yes
fwupdate	Yes	Yes	Yes
get	Yes	Yes	Yes
getconfig	Yes	Yes	Yes
gethostnetworkinterfaces	Yes	Yes	Yes
getled	Yes	Yes	Yes
getniccfg	Yes	Yes	Yes
getraclog	Yes	Yes	Yes
getractime	Yes	Yes	Yes
getsel	Yes	Yes	Yes
getsensorinfo	Yes	Yes	Yes
getssninfo	Yes	Yes	Yes
getsvctag	Yes	Yes	Yes

Table 2. Supported RACADM Subcommands

Subcommand	iDRAC on Blade Servers		
	Telnet/SSH/ Serial	Local RACADM	Remote RACADM
getsysinfo	Yes	Yes	Yes
gettracelog	Yes	Yes	Yes
getversion	Yes	Yes	Yes
help and help subcommand	Yes	Yes	Yes
hwinventory	Yes	Yes	Yes
ifconfig	Yes	Yes	Yes
inlettemphistory	Yes	Yes	Yes
jobqueue	Yes	Yes	Yes
krbkeytabupload	No	Yes	Yes
lclog	Yes	Yes	Yes
license	Yes	Yes	Yes
nicstatistics	Yes	Yes	Yes
ping	Yes	Yes	Yes
ping6	Yes	Yes	Yes
racdump	Yes	No	Yes
racreset	Yes	Yes	Yes
racresetcfg	Yes	Yes	Yes
remoteimage	Yes	Yes	Yes
rollback	Yes	Yes	Yes
sensorsetting	Yes	Yes	Yes
serveraction	Yes	Yes	Yes
set	Yes	Yes	Yes
setled	Yes	Yes	Yes
setniccfg	Yes	Yes	Yes
sshpkauth	Yes	Yes	Yes
sslcertupload	No	Yes	Yes
sslcertview	Yes	Yes	Yes
sslcertdelete	Yes	Yes	Yes
sslcsrgen	Yes	Yes	Yes
sslkeyupload	No	Yes	Yes
sslresetcfg	Yes	Yes	Yes
storage	Yes	Yes	Yes
swinventory	Yes	Yes	Yes
systemconfig	Yes	Yes	Yes
systemerase	Yes	Yes	Yes
systemperfstatistics	Yes	Yes	Yes

Table 2. Supported RACADM Subcommands

Subcommand	iDRAC on Blade Servers		
	Telnet/SSH/ Serial	Local RACADM	Remote RACADM
techsupreport	Yes	Yes	Yes
testemail	Yes	Yes	Yes
testtrap	Yes	Yes	Yes
testalert	Yes	Yes	Yes
traceroute	Yes	Yes	Yes
traceroute6	Yes	Yes	Yes
update	Yes	Yes	Yes
usercertupload	No	Yes	Yes
usercertview	Yes	Yes	Yes
vflashsd	Yes	Yes	Yes
vflashpartition	Yes	Yes	Yes
vmdisconnect	Yes	Yes	Yes

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**. 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 support content from the Dell EMC support site

Access supporting content related to an array of systems management tools using direct links, going to the Dell EMC support site, or using a search engine.

- Direct links:
  - For Dell EMC Enterprise Systems Management and Dell EMC Remote Enterprise Systems Management—https://www.dell.com/esmmanuals
  - For Dell EMC Virtualization Solutions—https://www.dell.com/SoftwareManuals
  - For Dell EMC OpenManage—https://www.dell.com/openmanagemanuals
  - For iDRAC—https://www.dell.com/idracmanuals
  - For Dell EMC OpenManage Connections Enterprise Systems Management—https://www.dell.com/OMConnectionsEnterpriseSystemsManagement
  - For Dell EMC Serviceability Tools—https://www.dell.com/serviceabilitytools
- Dell EMC support site:
  1. Go to https://www.dell.com/support.
  2. Click **Browse all products**.
  3. From the **All products** page, click **Software**, and then click the required link.
  4. Click the required product and then click the required 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.

2

RACADM Subcommand Details

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..
- clearasrscreen
- clearpending
- closessn
- clrsel
- config
- coredump
- coredumpdelete
- diagnostics
- eventfilters
- fcstatistics
- frontpanelerror
- fwupdate
- get
- getconfig
- gethostnetworkinterfaces
- getled
- getniccfg
- getraclog
- getractime
- getsel
- getsensorinfo
- getssninfo
- getsvctag
- getsysinfo
- gettracelog
- getversion
- hwinventory
- ifconfig
- inlettemphistory
- jobqueue
- krbkeytabupload
- lclog
- license
- netstat
- nicstatistics
- ping
- ping6
- RACADM Proxy
- racdump
- racreset

- racresetcfg
- remoteimage
- rollback
- sensorsettings
- serveraction
- set
- setled
- setniccfg
- sshpkauth
- sslcertdownload
- sslcertupload
- sslcertview
- sslcertdelete
- sslcsrgen
- sslkeyupload
- sslresetcfg
- storage
- swinventory
- systemconfig
- systemerase
- systemperfstatistics
- techsupreport
- testemail
- testtrap
- testalert
- traceroute
- traceroute6
- update
- usercertupload
- usercertview
- vflashsd
- vflashpartition
- vmdisconnect

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)

help and help subcommand

Table 3. help and help subcommand

Description	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`.
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

Address	HW Type	HW Address	Mask	Device
192.168.1.1	Ether	00:0d:65:f3:7c:bf	C	eth0

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). • If the `-dom` option is specified, then the `-wom` and `-dow` 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.
	• `-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:
	`racadm autoupdatescheduler create -u ftpuser -p ftppwd -l` **`ftp.test.com`** `-f cat.xml.gz -ph 10.20.30.40 -pu padmin -pp ppwd -po 8080 -pt http -time 14:30 -dom 1 -rp 5 -a 1`
	  ○ For HTTP, run the command:
	`racadm autoupdatescheduler create -u httpuser -p httppwd -l http://test.com -f cat.xml -ph 10.20.30.40 -pu padmin -pp ppwd - po 8080 -pt http -time 14:30 -dom 1 -rp 5 -a 1`
	  ○ 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 = 14:30dayofmonth =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 then 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 `<group>` 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 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:
	  ○ Collect and export remote diagnostics report from the iDRAC.
	  The results of the latest successfully executed remote Diagnostics will be available and retrievable remotely through an NFS or a CIFS share.
	  ○ `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:
	  ○ `pwrcycle` — 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:
	`racadm diagnostics run -m 1 -r forced -s 20121215101010 -e TIME_NA`
	• To export a remote diagnostics report to CIFS share:
	`racadm diagnostics export -f diagnostics -l //192.168.0/cifs -u administrator -p xxx`
	• To export a remote diagnostics report to NFS share:
	`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` • `Info` 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`, `power off`, 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:

Table 4. fwupdate — Details (continued)

	• 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>]`
	
	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. • `—s` — This option returns the status of the update process. • `-a` — The `-a` option specifies TFTP server IP address used for firmware image. This option must be used with the `-g` 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. • `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. • — 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:
	`racadm fwupdate -p -u -d /tmp/images`
	• Upload firmware image from FTP server and start firmware update:
	`racadm fwupdate -f 192.168.0.10 test test -d firmimg.d7`

Table 4. fwupdate — Details (continued)

	• Upload firmware image from TFTP server and start firmware update:
	`racadm fwupdate -g -u -a 192.168.0.100 -d /tmp/images`
	• Query the current status of the firmware update process:
	`racadm fwupdate -s`
	• Rollback to the standby firmware:
	`racadm fwupdate -r`
	• Upload firmware image from TFTP server, start firmware update. After firmware update is complete, delete previous iDRAC configuration:
	`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.

FW Update Method	iDRAC on Blade Servers	iDRAC on Rack and Tower Servers
Local RACADM	Yes	Yes
Local RACADM-TFTP	Yes	Yes
Local RACADM-FTP	Yes	Yes
Remote RACADM	Yes	Yes
Remote RACADM-TFTP	Yes	Yes
Remote RACADM-FTP	Yes	Yes
Firmware RACADM-TFTP	Yes	Yes
Firmware RACADM-FTP	Yes	Yes

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**
	`racadm get <FQDD Alias>.<group>`
	`racadm get <FQDD Alias>.<group>.<object>`
	`racadm get <FQDD Alias>.<group>.[<index>].<object>`
	`racadm get <FQDD Alias>.<index>.<group>.<index>.<object>`
	Multi-object Get
	`racadm get -f <filename>`
	`racadm get -f <filename> -t xml -l <NFS share> [--clone | --replace ] [--includeph]`
	`racadm get -f <filename> -t xml -l <NFS share> -c <FQDD>[,<FQDD>*]`
	`racadm get -f <filename> -t xml -u <username> -p <password> -l <CIFS share> [--clone | --replace ] [--includeph]`
	`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.LCAttributes`
	  ▪ `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.
	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. **NOTE:** if –includeph is not used, the output of the passwords will be in the .xml file in clear text. **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	Key Attributes
cfgEmailAlert	cfgEmailAlertAddress
cfgLDAPRoleGroup	cfgLDAPRoleGroupDN
cfgServerInfo	cfgServerBmcMacAddress
cfgStandardSchema	cfgSSADRoleGroupName
cfgTraps	cfgTrapsAlertDestIPAddr
cfgUserAdmin	cfgUserAdminUserName
Groups	Key Attributes
cfgEmailAlert	cfgEmailAlertAddress
cfgLDAPRoleGroup	cfgLDAPRoleGroupDN
cfgServerInfo	cfgServerBmcMacAddress

<table>
<tr><td>cfgStandardSchema</td><td>cfgSSADRoleGroupName</td></tr>
<tr><td>cfgTraps</td><td>cfgTrapsAlertDestIPAddr</td></tr>
<tr><td>cfgUserAdmin</td><td>cfgUserAdminUserName</td></tr>
<tr><td>Example</td><td>

Displays the configuration properties (objects) that are contained in the group <code>cfgLanNetworking</code>.
<code>racadm getconfig -g cfgLanNetworking</code>
Saves all group configuration objects from iDRAC to <code>myrac.cfg</code>.
<code>racadm getconfig -f myrac.cfg</code>
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.
Saves all group configuration objects from iDRAC to <code>myrac.cfg</code>.
<code>racadm getconfig -f myrac.cfg</code>
Saves all group configuration objects from iDRAC to <code>myrac.cfg</code>.
<code>racadm getconfig -f myrac.cfg</code>
If you do not configure the following key attributes in their respective groups for a particular index, the groups are not saved in to the file. This is applicable for all the index groups.
<table>
<tr><th>Groups</th><th>Key Attributes</th></tr>
<tr><td>cfgEmailAlert</td><td>cfgEmailAlertAddress</td></tr>
<tr><td>cfgLDAPRoleGroup</td><td>cfgLDAPRoleGroupDN</td></tr>
<tr><td>cfgServerInfo</td><td>cfgServerBmcMacAddress</td></tr>
<tr><td>cfgStandardSchema</td><td>cfgSSADRoleGroupName</td></tr>
<tr><td>cfgTraps</td><td>cfgTrapsAlertDestIPAddr</td></tr>
<tr><td>cfgUserAdmin</td><td>cfgUserAdminUserName</td></tr>
</table>

Displays a list of the available configuration groups on iDRAC in an alphabetical order.
<code>racadm getconfig -h</code>
Displays the configuration properties for the user named root.
<code>racadm getconfig -u root</code>
Displays the user group instance at index 2 with verbose information for the property values.
<code>racadm getconfig -g cfgUserAdmin -i 2 -v</code>
Displays an entire group of serial configuration.
<code>racadm getconfig -g cfgSerial</code>
Displays a single object from a particular group.
<code>racadm getconfig -g cfgSerial -o cfgSerialBaudRate</code>
Displays an indexed group.
<code>racadm getconfig -g cfgUserAdmin -o cfgUserAdminUserName -i 2</code>
Displays the current Enhanced Cooling Mode property configuration.
<code>racadm getconfig -g cfgThermal</code>

</td></tr>
</table>

gethostnetworkinterfaces

Description	Displays host network interface details. **NOTE:** To run this subcommand, you must have iDRAC service module installed on the server operating system.

Synopsis	`racadm gethostnetworkinterfaces`
	
	`racadm gethostnetworkinterfaces <NIC FQDD>`

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`
	`DHCPServerV4 : 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 DNSServer Address 0: fec0:0:0:ffff::1`
	`IPv6 DNSServer Address 1: fec0:0:0:ffff::2`
	`IPv6 DNSServer 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`
	`Description : Broadcom NetXtreme Gigabit Ethernet`
	`Status : Up`
	`Interface Type : Ethernet`
	`DHCP : Enabled`
	`DHCPServerV4 : 10.94.224.25`
	`MAC Address : 14-FE-B5-FF-B1-9C`
	`FQDD : NIC.Integrated.1-1-1`
	`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 DNSServer Address 0: 10.116.2.250`
	`IPv4 DNSServer 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	`racadm getled`
Input	
Output	• LED is blinking • LED is not-blinking

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

getniccfg

Description	Displays the current and static NIC settings for iDRAC.
Synopsis	`racadm getniccfg [-m <module>]`
Input	
Output	The `getniccfg` subcommand displays an appropriate error message if the operation is not successful. Otherwise, the output is displayed in the following format:

IPv4 settings:	
NIC Enabled	=1
IPv4 Enabled	=1
DHCP Enabled	=1
IP Address	=10.94.225.165
Subnet Mask	=255.255.255.128
Gateway	=10.94.225.129
IPv6 settings:	
IPv6 Enabled	=1
DHCP6 Enabled	=0
IP Address 1	=2000:de11:bcd1:fc14:1234:5678:2468:abcd
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	<pre>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</pre>

Example	Display the recent 2 records for RAC log
	<pre>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
	----------</pre> 	

getractime

Description	Displays the current iDRAC time.
Synopsis	• `racadm getractime [-d]`
Input	• `-d` — Displays the time in the format, YYYYMMDDhhmmss.
Output	The current iDRAC time is displayed.

Example	• <pre>racadm getractime
	Mon May 13 17:17:12 2013</pre>
	• <pre>racadm getractime -d
	20141126114423</pre>

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

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

Example

```
racadm getsensorinfo
Sensor Type : POWER
```

<Sensor Name>	<Status>	<Type>
PS1 Status	Present	AC

```
Sensor Type : TEMPERATURE
```

<Sensor Name>	<Status>	<Reading>	<lc>	<uc>	<lnc>[R/W]	<Unc>[R/W]
System Board Inlet Temp	Ok	20 C	-7 C	47 C	3 C [Y]	42C [Y]
System Board Exhaust Temp	Ok	19 C	0 C	75 C	0 C [N]	70 C [N]

CPU1 Temp	Ok	59 C	3 C	97 C	8 C [N]	92 C [N]

Sensor Type : FAN

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

Sensor Type : VOLTAGE

<Sensor Name>	<Status>	<Reading>	<lc>	<uc>
CPU1 VCORE PG	Ok	Good	NA	NA
System Board 3.3V PG	Ok	Good	NA	NA
System Board 5V AUX PG	Ok	Good	NA	NA
CPU1 M23 VPP PG	Ok	Good	NA	NA
System Board 1.05V PG	Ok	Good	NA	NA
CPU1 M23 VDDQ PG	Ok	Good	NA	NA
CPU1 M23 VTT PG	Ok	Good	NA	NA
System Board 5V SWITCH PG	Ok	Good	NA	NA
System Board VCCIO PG	Ok	Good	NA	NA
System Board 2.5V AUX PG	Ok	Good	NA	NA
CPU1 M01 VDDQ PG	Ok	Good	NA	NA
System Board NDC PG	Ok	Good	NA	NA
CPU1 M01 VPP PG	Ok	Good	NA	NA
System Board 1.5V PG	Ok	Good	NA	NA
System Board PS2 PG Fail	Ok	Good	NA	NA
System Board PS1 PG Fail	Ok	Good	NA	NA

System Board 1.5V AUX PG	Ok	Good	NA	NA
CPU1 M01 VTT PG	Ok	Good	NA	NA
PS1 Voltage 1	Ok	240 V	NA	NA
System Board DIMM PG	Ok	Good	NA	NA

```
Sensor Type : CURRENT
```

<Sensor Name>	<Status>	<Reading>	<lc>	<uc>	<lnc> [R/W]	<unc> [R/W]
PS1 Current 1	Ok	0.4 Amps	NA	NA	0 Amps [N]	0 Amps [N]
System Board Pwr Consumption	Ok	56 Watts	NA	1386 Watts	0 Watts [N]	1260 Watts [N]

```
Sensor Type : PROCESSOR
```

<Sensor Name>	<Status>	<State>	<lc>	<uc>
CPU1 Status	Ok	Presence Detected	NA	NA
CPU2 Status	N/A	Absent	NA	NA

```
Sensor Type : MEMORY
```

<Sensor Name>	<Status>	<State>	<lc>	<uc>
DIMM A1	N/A	Presence Detected	NA	NA
DIMM A2	N/A	Absent	NA	NA
DIMM A3	Ok	Absent	NA	NA
DIMM A4	N/A	Absent	NA	NA
DIMM A5	N/A	Absent	NA	NA
DIMM A6	N/A	Absent	NA	NA
DIMM A7	N/A	Absent	NA	NA
DIMM A8	N/A	Absent	NA	NA
DIMM A9	N/A	Absent	NA	NA
DIMM A10	N/A	Absent	NA	NA
DIMM A11	N/A	Absent	NA	NA
DIMM A12	N/A	Absent	NA	NA
DIMM B1	N/A	Absent	NA	NA
DIMM B2	N/A	Absent	NA	NA
DIMM B3	N/A	Absent	NA	NA
DIMM B4	N/A	Absent	NA	NA
DIMM B5	N/A	Absent	NA	NA
DIMM B6	N/A	Absent	NA	NA

DIMM B7	N/A	Absent	NA	NA
DIMM B8	N/A	Absent	NA	NA
DIMM B9	N/A	Absent	NA	NA
DIMM B10	N/A	Absent	NA	NA
DIMM B11	N/A	Absent	NA	NA
DIMM B12	N/A	Absent	NA	NA

```
Sensor Type : Chassis Controller
```

<Sensor Name>	<Status>	<State>
Chassis Controller	OK	OK

```
/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
4 23:09:40 idrac8 L4, S3 [10297]: probename is Chassis Controller
4 23:09:40 idrac8 L4, S3 [10297]: pCMCStatusobj->offsetKey is 24
4 23:09:40 idrac8 L4, S3 [10297]: pCMCStatusobj->sensorValue is 0
4 23:09:40 idrac8 L4, S3 [10297]: MAP Uninitialized, time to uninit = 0 millisec
4 23:09:40 idrac8 L4, S3 [10297]: RACADM total execution time: 1680 milliseconds
```

```
Sensor Type : BATTERY
```

<Sensor Name>	<Status>	<Reading>	<lc>	<uc>
System Board CMOS Battery	Ok	Present	NA	NA
PERC1 ROMB Battery	Ok	Unknown	NA	NA
PERC2 ROMB Battery	Ok	Unknown	NA	NA

```
Sensor Type : PERFOMANCE
```

<Sensor Name>	<Status>	<Status>	<lc>	<uc>
System Board Power Optimized	Ok	Not Degraded	NA	NA

```
Sensor Type : INTRUSION
```

<Sensor Name>	<Intrusion>	<Status>
System Board Intrusion	Closed	Power ON

```
Sensor Type : REDUNDANCY
```

<Sensor Name>	<Status>	<Type>

System Board Fan Redundancy	Full Redundant	Fan
System Board PS Redundancy	Disabled	PSU

```
Sensor Type : SYSTEM PERFORMANCE
```

<Sensor Name>	<Status>	<Reading>	<lc>	<uc>	<lnc> [R/W]	<unc> [R/W]
System Board CPU Usage	Non-Critical	0%	0%	100%	0% [N]	99% [Y]
System Board IO Usage	Non-Critical	0%	0%	100%	0% [N]	99% [Y]
System Board MEM Usage	Non-Critical	0%	0%	100%	0% [N]	99% [Y]
System Board SYS Usage	Non-Critical	0%	0%	100%	0% [N]	99% [Y]

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
```

SSNID	Type	User	IP Address	Login Date/Time
58999	SSH	root	192.168.0.10	04/07/2016 12:00:34

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	`racadm getsysinfo [-d] [-A] [-c] [-4] [-6]`
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:fefc: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         = I
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`

<Server>	*<CPLD Version>*	*<Blade Type>*
server-1	1.0.5	PowerEdgeM520

server-2	1.0.3	PowerEdgeM610x
server-4	1.0.0	PowerEdgeM710HD
server-5	1.0.3	PowerEdgeM710
server-7	1.0.6	PowerEdgeM620
server-9	1.0.5	PowerEdgeM520

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

```
racadm getversion -b
```

<Server>	*<BIOS Version>*	*<Blade Type>*
server-1	1.6.0	PowerEdgeM520
server-2	6.3.0	PowerEdgeM610x
server-4	7.0.0	PowerEdgeM710HD
server-5	6.3.0	PowerEdgeM710
server-7	1.7.1	PowerEdgeM620
server-9	1.7.1	PowerEdgeM520

<Switch>	*<Model Name>*	*<HW Version>*	*<FW Version>*
switch-1	MXL 10/40GbE	X01	9-2(0-296)
switch-2	M8024-k 10GbE SW	A00	5.0.1.3
switch-3	Dell PowerConnect M8024	X00	
switch-4	Dell PowerConnect M8024	X00	

switch-5	Dell PowerConnect M6348	X02	
switch-6	Dell PowerConnect M6220	A01	

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 OCe14102-U1-D - 00:90:FA:4C:FE:C2
PartitionCapable :                              1

NIC.Slot.2-1-2:Emulex OCe14102-U1-D - 00:90:FA:4C:FE:C3
PartitionCapable :                              2

NIC.Slot.2-1-3:Emulex OCe14102-U1-D - 00:90:FA:4C:FE:C4
PartitionCapable :                              3

NIC.Slot.2-1-4:Emulex OCe14102-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
PCI Vendor ID:                                1077
PCI Sub Vendor ID:                            1077
PCI Device ID:                                2532
PCI Sub Device ID:                            015c
PCI Bus:                                      67
PCI Device:                                   0
PCI Function:                                 0
Vendor Name:                                  Unavailable
Device Name:                                  QLogic QLE2560 8Gb Fibre Channel
Adapter - 21000024FF089D8A
WWN:                                          20:00:00:24:FF:08:9D:8A
VirtWWN:                                      20:00:00:24:FF:08:9D:8A
WWPN:                                         21:00:00:24:FF:08:9D:8A
VirtWWPN:                                     21:00:00:24:FF:08:9D:8A
Chip Type:                                    ISP2532
Family Version:                               02.57.14
EFI Version:                                  2.34
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
```

`eth0`	`Link encap:Ethernet  HWaddr 00:1D:09:FF:DA:23`
	`inet addr:192.168.0.0 Bcast:192.168.0.255 Mask:255.255.255.0`
	`UP BROADCAST RUNNING MULTICAST  MTU:1500 Metric:1`
	`RX packets:2550665 errors:0 dropped:0 overruns:0 frame:0`
	`TX packets:0 errors:0 dropped:0 overruns:0 carrier:0`
	`collisions:0 txqueuelen:1000`
	`RX bytes:272532097 (259.9 MiB)  TX bytes:0 (0.0 B)`

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  = 23C ( 73.4F )
Last Day   = 24C ( 75.2F )
Last Week  = 24C ( 77.0F )
Last Month = 25C ( 77.0F )
Last Year  = 23C ( 73.4F )

Peak Temperatures
Last Hour  = 23C ( 73.4F ) [At Wed, 30 May 2012 11:00:57]
Last Day   = 25C ( 77.0F ) [At Tue, 29 May 2012 15:37:23]
Last Week  = 27C ( 80.6F ) [At Fri, 25 May 2012 10:38:20]
Last Month = 29C ( 84.2F ) [At Wed, 16 May 2012 15:34:13]
Last Year  = 29C ( 84.2F ) [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. **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 lclog. • 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 <expiry 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.
	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.
	  ○ `pwrcycle` — 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 yyyymmddhhmmss 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 yyyymmddhhmmss 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`
	`RAC1024: Successfully scheduled a job.`
	`Verify the job status using "racadm jobqueue view -i JID_xxxxx" command.`
	`Commit JID = JID_927008261880`

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>]`

	`<filename>` is the name of the file including the path.
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. **NOTE:** Only a user with **Server Control** and **Configure iDRAC** privilege can run the `import`, `delete`, and `replace` commands. **NOTE:** For export license, you need **Login** and **Configure iDRAC** privilege.

Examples

- View all License Information on System.

```
$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       = Q3XJmvoxZdJVSuZemDehlcrd
```

```
                          License Bound        = H1VGF2S
                          Expiration           = Not Applicable
```

- Import a new license to a specific device in a known location.

```
$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.

```
 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.

```
 racadm license import -f Licen.xml -l 192.168.0:/share
-c idrac.embedded.1
```

- Import a license by overriding the EULA warning.

```
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.

```
 racadm license import -f License.xml -c idrac.embedded.1
```

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

```
 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.

```
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.

```
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.

```
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 displays 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

Total RDMA Protection Errors:            0
```

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

```
$ 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:

```
$ 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	`racadm ping <ipaddress>`
Input	`<ipaddress>` — The IP address of the remote endpoint to ping.

Output	`PING 192.168.0 (192.168.0): 56 data bytes64 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 lossround-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	`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`
	`Reply from 2011:de11:bdc:194::31: time<1ms`
	`Reply from 2011:de11:bdc:194::31: time<1ms`
	`Reply from 2011:de11:bdc:194::31: time<1ms`
	
	`Ping statistics for 2011:de11:bdc:194::31:`
	`Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),`
	`Approximate round trip times in milli-seconds:`
	`Minimum = 0ms, Maximum = 0ms, Average = 0ms`

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.

Required CMC Privilege for an operation
CMC Login User
Chassis Configuration Administrator
User Configuration Administrator
Clear Logs Administrator
Chassis Control Administrator
Server Administrator

	Test Alert User Debug Command Administrator Fabric x Administrator (where x is A, B, or C) • 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 • Session Information • Process Information • RAC Firmware Build Log
Synopsis	`racadm racdump`
Input	N/A

Example

```
================================================================================
 General System/RAC Information
================================================================================

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
Destination                                    Next Hop
Flags Metric Ref    Use Iface
::1/128                                        ::                                      U
 0      1        1 lo
::1/128                                        ::                                      U
 256    0        0 lo
fe80::1a03:73ff:fef7:b7ca/128                  ::                                      U
 0      0        1 lo
fe80::/64                                      ::                                      U
 256    0        0 eth1
ff00::/8                                       ::                                      U
 256    0        0 eth1


Kernel IP routing table
Destination     Gateway         Genmask         Flags   MSS Window  irtt Iface
0.0.0.0         192.168.0.1     0.0.0.0         UG        0 0          0 bond0
192.168.0.1     0.0.0.0         192.168.0.1     U         0 0          0 bond0


Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address               Foreign Address             State
tcp        0      0 192.168.0.1:53986          192.168.0.1:199             ESTABLISHED
tcp        0      0 192.168.0.1:53985          192.168.0.1:199             ESTABLISHED
tcp        0      0 192.168.0.1:199            192.168.0.1:53986           ESTABLISHED
tcp        0      0 192.168.0.1:199            192.168.0.1:53985           ESTABLISHED


================================================================================
 Session Information
================================================================================
No active sessions currently exist.

================================================================================
 Process Information
================================================================================
  PID USER       VSZ STAT COMMAND
    1 root      5236 S    {systemd} /sbin/init
    2 root         0 SW   [kthreadd]
    3 root         0 SW   [ksoftirqd/0]
    6 root         0 SW   [watchdog/0]
    7 root         0 SW<  [khelper]
    8 root         0 SW   [kdevtmpfs]
    9 root         0 SW<  [netns]
  153 root         0 SW   [sync_supers]
  155 root         0 SW   [bdi-default]
  157 root         0 SW<  [kblockd]
  166 root         0 SW   [khubd]
16233 root     40916 S    racadm racdump
16246 root      3824 S    sh -c /bin/ps
16247 root      3828 R    /bin/ps
26851 root         0 SW   [kworker/u:3]


================================================================================
 RAC Firmware Build Log
================================================================================
BLD_TAG=idracfw_bldtag_2.05.05.05_691231_1800_00
BLD_VERSION=2.05.05.05
BLD_NUMBER=69.12.31
BLD_DATE=2.00.00.00.733
BLD_TYPE=idrac
BLD_KERNEL=ZIMAGE
```

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 recreset 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. **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.

remoteimage

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 remoteimage [-m <module> | -a]` • `racadm remoteimage -d [-m <module> | -a]` • `racadm remoteimage -s [-m <module> | -a]` • `racadm remoteimage -c [-m <module> | -a] [-u <username> -p <password> -l <image_path>]` • `racadm remoteimage -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. **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: `racadm remoteimage -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.
	`racadm remoteimage -c -u "user" -p "xxx" -l //shrloc/foo.iso`
	`Remote Image is now Configured`
	• Disable Remote File Sharing.
	`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.
	`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.
	`racadm remoteimage -c -u admin -p xxx -l //192.168.0/dev/floppy.img`
	• Deploy a remote image on iDRAC NFS Share.
	`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	`racadm rollback <FQDD> [--reboot]` **NOTE:** To get the list of available rollback versions and FQDDs, run the `racadm swinventory` command.
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:
	`racadm rollback iDRAC.Embedded.1-1`
	`RAC1056: Rollback operation initiated successfully.`
	• To perform a graceful system reboot after BIOS firmware rollback:
	`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.

Example	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 Contoller 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 `FQDD`s require a system reboot to apply the new values; other `FQDD`s optionally support immediate application of new values. If the imported file contains ONLY immediate application-capable `FQDD`s 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.

```
$ racadm set system.lcd.LCDUserString test
```

- ○ Configure iDRAC name.

```
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.

```
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

```
racadm jobqueue view -i <Job ID>
```

Multi-object Set of real-time objects

- Configure the iDRAC using a local INI file.

```
racadm set -f myidrac.ini
```

- Configure the iDRAC using a local Server Configuration Profile XML file containing only iDRAC settings.

```
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.

```
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.

```
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 systems 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
  - ○ After reboot, wait for the job to complete by checking the job status

	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 svcacct -k <key_index> -p <privilege> -t <PK_key_text>` • `racadm sshpkauth -i svcacct -k <key_index> -p <privilege> -f <PK_key_text>` • `racadm sshpkauth -v -i svcacct -k all|<key_index>` • `racadm sshpkauth -d -i svcacct -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 `-f` option is not supported on Telnet or SSH or serial RACADM. • `-v` — View the key text for the index provided. • `-d` — Delete the key for the index provided.

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    AAAAB3NzaC1yc2EAAAABIwAAAIEAzzy+k2npnKqVEXGXIzo0sbR6JgA5YNbWs3ekoxXV
               fe3yJVpVc/
5zrrr7XrwKbJAJTqSw8Dg3iR4n3vUaP+lPHmUv5Mn55Ea6LHUslAXFqXmOdlThd
               wilU2VLw/iRH1ZymUFnut8ggbPQgqV2L8bsUaMqb5PooIIvV6hy4isCNJU=
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
	  ○ `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
```

Serial Number	01
Subject Information:	
Country Code (CC)	US
State (S)	Texas
Locality (L)	Round Rock
Organization (O)	Dell Inc.
Organizational Unit (OU)	Remote Access Group
Common Name (CN)	iDRAC Default certificate
Issuer Information:	
Country Code (CC)	US
State (S)	Texas
Locality (L)	Round Rock
Organization (O)	Dell Inc.
Organizational Unit (OU)	Remote Access Group
Common Name (CN)	iDRAC Default certificate
Valid From	Jul 7 23:54:19 2011 GMT
Valid To	Jun 4 23:54:19 2021 GMT

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

```
00
```

```
US
```

```
Texas
```

```
Round Rock
```

```
Dell Inc.
```

```
Remote Access Group
```

```
iDRAC default certificate
```

```
US
```

```
Texas
```

```
Round Rock
```

```
Dell Inc.
```

```
Remote Access Group
```

```
iDRAC default certificate
```

```
Jun 7 23:54:19 2011 GMT
```

```
Jun 4 23:54:19 2021 GMT
```

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	`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	`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	`racadm sslresetcfg`
Input	N/A
Example	`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:
	`racadm storage help get`
	● To generate and view information about the inventory of storage root node, run the following command:
	`racadm storage get status`
	● To generate and view information about the inventory of controllers, run the following command:
	`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:
	`racadm storage get controllers`
	● To get the properties of PCIeSSD controller, run the following command:
	`racadm storage get controllers:<PcieSSD controller FQDD>`

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

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

```
racadm storage get batteries --refkey <controller FQDD's separated by
comma>
```

```
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:

```
racadm storage get vdisks
```

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

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

```
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:

```
racadm storage get enclosures -o
```

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

```
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:

```
racadm storage get enclosures
```

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

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

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

```
racadm storage get pdisks
```

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

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

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

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

```
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:

```
racadm storage get pdisks
```

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

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

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

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

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

```
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:

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

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

```
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:

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

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

```
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 PCIeSSD drive for removal, run the following command:
	`racadm storage preparetoremove <PCIeSSD FQDD>`
	NOTE: The Prepare to Remove task is not supported for HHHL PCIe SSD devices.
	• To perform a secure erase operation on PCIeSSD 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.
	• `-rl` — 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-Spanned Striping with Mirroring
	  ○ `r50` — storage 50-Spanned Striping with Parity
	  ○ `r60` — storage 60-Spanned 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> — <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 status
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> -o -p <property names separated by comma>
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>
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
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 controllers:RAID.INTEGRATED.0
racadm storage get emms:EMM.Slot.0:ENCLOSURE.EXTERNAL.0-0:RAID.INTEGRATED.0
racadm storage get controllers: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
racadm storage get pdisks --refkey ENCLOSURE.EXTERNAL.0-0:RAID.INTEGRATED.0
racadm storage get batteries --refkey RAID.INTEGRATED.0 -o -p status,state,name
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                       = 0x5d
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                   = Capable
SupportRAID10UnevenSpans          = Supported
SupportEnhancedAutoForeignImport  = Supported
EnhancedAutoImportForeignConfig   = Enabled
SupportControllerBootMode         = Supported
ControllerBootMode                = Continue Boot On Error
RealtimeConfigurationCapability   = Capable
CurrentControllerMode             = RAID
```

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 has 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.Modular.3-1
   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
   PatrolReadRate                   = 50
   PatrolReadMode                   = Manual
   PatrolReadState                  = Stopped
   CheckConsistencyMode             = Normal
   LoadBalanceSetting               = Disabled
   CopybackMode                     = OFF
   PreservedCache                   = Not Present
   CacheMemorySize                  = 2048 MB
   PersistHotspare                  = Disabled
   SpindownUnconfiguredDrives       = Disabled
   SpindownHotspare                 = Disabled
   Timeintervalforspindown          = 30 (Minutes)
   SecurityStatus                   = Encryption Capable
   EncryptionMode                   = None
   SasAddress                       = 0x5B083FE0E3EF5A00
   PciDeviceId                      = 0x5d
   PciSubdeviceId                   = 0x1f4d
   PciVendorId                      = 0x1000
   PciSubvendorId                   = 0x1028
   PciBus                           = 0x7
   PciDevice                        = 0x0
   PciFunction                      = 0x0
   BusWidth                         = 8x or x8
   SlotLength                       = Other
   SlotType                         = PCI Express Gen3
   MaxCapableSpeed                  = 12.0 Gb/s
   LearnMode                        = Not supported
   T10PICapability                  = Capable
   SupportRAID10UnevenSpans         = Supported
   SupportEnhancedAutoForeignImport = Supported
   EnhancedAutoImportForeignConfig  = Disabled
   SupportControllerBootMode        = Supported
   ControllerBootMode               = Continue Boot On Error
   RealtimeConfigurationCapability  = Capable
   CurrentControllerMode            = RAID
```

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

```
racadm storage get controllers -o
RAID.Embedded.1-1
   Status                           = Unknown
   DeviceDescription                = Embedded RAID Controller 1
   RollupStatus                     = Unknown
   Name                             = PERC S130 Controller (PCI Slot 0)
```

```
    PciSlot                             = 0
    FirmwareVersion                     = 4.0.0-0037
    DriverVersion                       = Information Not Available
    RebuildRate                         = 0
    BgiRate                             = 0
    CheckConsistencyRate                = 0
    ReconstructRate                     = 0
    PatrolReadRate                      = 0
    PatrolReadMode                      = Not supported
    PatrolReadState                     = Unknown
    CheckConsistencyMode                = Not supported
    LoadBalanceSetting                  = Not Supported
    CopybackMode                        = Not supported
    PreservedCache                      = Not Present
    CacheMemorySize                     = 0 MB
    PersistHotspare                     = Disabled
    SpindownUnconfiguredDrives          = Disabled
    SpindownHotspare                    = Disabled
    Timeintervalforspindown             = 0 (Minutes)
    SecurityStatus                      = Unknown
    EncryptionMode                      = None
    SasAddress                          = Not applicable
    PciDeviceId                         = 0x8d66
    PciSubdeviceId                      = 0x61b
    PciVendorId                         = 0x8086
    PciSubvendorId                      = 0x1028
    PciBus                              = 0x0
    PciDevice                           = 0x0
    PciFunction                         = 0x0
    BusWidth                            = Unknown
    SlotLength                          = Unknown
    SlotType                            = Unknown
    MaxCapableSpeed                     = 6.0 Gb/s
    LearnMode                           = Not supported
    T10PICapability                     = Not Capable
    SupportRAID10UnevenSpans            = Not Supported
    SupportEnhancedAutoForeignImport = Not Supported
    EnhancedAutoImportForeignConfig  = Unknown
    SupportControllerBootMode           = Not Supported
    RealtimeConfigurationCapability  = Incapable
    CurrentControllerMode               = Not Supported
```

- 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
```

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 -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
RollupStatus	Ok
State	Online
OperationalState	Not applicable
Layout	Raid-0
Size	278.88 GB
SpanDepth	1
AvailableProtocols	SAS
MediaType	HDD

ReadPolicy	Read Ahead
WritePolicy	Write Back
StripeSize	64K
DiskCachePolicy	Default
BadBlocksFound	NO
Secured	NO
RemainingRedundancy	0
EnhancedCache	Not Applicable
T10PIStatus	Disabled
BlockSizeInBytes	512

- 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.

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

Status	Ok
State	Ready
DeviceDescription	Backplane 1 on Connector 0 of Integrated RAID Controller 1
RollupStatus	Ok
Name	BP13G+EXP 0:1
BayId	1
FirmwareVersion	0.23
SasAddress	0x500056B31234ABFD
SlotCount	24

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

```
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
Disk.Bay.23:Enclosure.Internal.0-1:RAID.Integrated.1-1
   Status                          = Ok
   DeviceDescription               = Disk 23 in Backplane 1 of Integrated RAID
Controller 1
   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
Size                            = 278.88 GB
FailurePredicted                = NO
RemainingRatedWriteEndurance    = Not Applicable
```

```
SecurityStatus                  = Not Capable
BusProtocol                     = SAS
MediaType                       = HDD
UsedraidDiskSpace               = 278.88 GB
AvailableraidDiskSpace          = 0.00 GB
Hotspare                        = NO
Manufacturer                    = SEAGATE
ProductId                       = ST9300605SS
Revision                        = CS05
SerialNumber                    = 6XP40SA9
PartNumber                      = CN0745GC7262228706R7A00
NegotiatedSpeed                 = 6.0 Gb/s
ManufacturedDay                 = 4
ManufacturedWeek                = 32
ManufacturedYear                = 2012
SasAddress                      = 0x5000C5005952386D
FormFactor                      = 2.5 Inch
raidNominalMediumRotationRate   = 10000
T10PICapability                 = Not Capable
BlockSizeInBytes                = 512
MaxCapableSpeed                 = 6 Gb/s
```

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
```

- To generate and view information about the inventory of fans connected to the enclosure.

  The following command displays all the fan keys connected to the enclosures:

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

  The following command displays all the fan objects for the enclosure FQDD:

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

  ```
  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 connected to the enclosure.

  The following command returns all the EMM keys connected to the enclosures:

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

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

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

  The following command is an optimized and filtered version:

  ```
  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 connected to the enclosure.

  The following command displays all the PSUs connected to the enclosures:

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

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

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

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.8:Enclosure.Internal.0-1:PCIeExtender.Slot.3
Disk.Bay.6:Enclosure.Internal.0-1:PCIeExtender.Slot.3
Disk.Bay.7: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|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]
------------------------------------------------------------------------------

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 -- ComponentType = FIRMWARE ElementName = Integrated Remote Access Controller FQDD = iDRAC.Embedded.1-1 InstallationDate = 2013-06-11T13:02:48Z Current 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.LCAttributes.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.
	`racadm systemconfig backup [-f <filename>] <target> [-n <passphrase>][-l <location> -u <user name> -p <password>] [--vFlash] -time <time> [-dom <DayOfMonth>] [-wom <WeekOfMonth>] [-dow <DayofWeek>] -rp <repeat> -mb <MaxBackup>`
	• 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 '*' (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	Job ID is displayed when the back up or restore operation is successful.

Example	• 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: o `bios` o `diag` o `drvpack` o `idrac` o `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     = 0%
Last Day      = 0%
Last Week     = 0%

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 see the *Integrated Dell Remote Access Controller (iDRAC8) and iDRAC7 RACADM Command Line Interface Reference Guide* available at **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	`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	`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>] [--verifycatalog]`
	
	`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>] [--verifycatalog]`
	
	`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. • `--verifycatalog` — 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_809364633532" 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`

	• Perform update from **ftp.dell.com**.
	`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`
	`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 : Jun 7 23:54:19 2011 GMT`
	`Valid To : Jun 4 23:54:19 2021 GMT`

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 upto 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/isoimge.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`

3

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
- cfgUserDomain
- cfgServerPower
- cfgServerPowerSupply
- cfgIPv6LanNetworking
- cfgIpv6StaticLanNetworking
- cfgIPv6URL
- cfgIpmiSerial
- cfgSmartCard
- cfgNetTuning

- cfgSensorRedundancy
- cfgVFlashSD
- cfgVFlashPartition
- cfgLogging
- cfgRacSecurity

Displayable Characters

Displayable characters include the following set:

```
abcdefghijklmnopqrstuvwxwz

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.

Subcommand	iDRAC on Blade Servers	iDRAC on Rack and Tower Servers
idRacInfo	Yes	Yes
cfgStaticLanNetworking		
cfgRemoteHosts	Yes	Yes
cfgUserAdmin	Yes	Yes
cfgEmailAlert	Yes	Yes
cfgSessionManagement	Yes	Yes
cfgSerial	Yes	Yes
cfgOobSnmp	Yes	Yes
cfgRacTuning	Yes	Yes
ifcRacManagedNodeOs	Yes	Yes
cfgRacVirtual	Yes	Yes
cfgServerInfo	No	Yes
cfgActiveDirectory	Yes	Yes
cfgLDAP	Yes	Yes
cfgLdapRoleGroup	Yes	Yes
cfgStandardSchema	Yes	Yes
cfgThermal		
cfgIpmiSol	Yes	Yes
cfgIpmiLan	Yes	Yes
cfgIpmiPetIpv6	Yes	Yes
cfgIpmiPef	Yes	Yes

Subcommand	iDRAC on Blade Servers	iDRAC on Rack and Tower Servers
cfgIpmiPet	Yes	Yes
cfgUserDomain	Yes	Yes
cfgServerPower	Yes	Yes
cfgServerPowerSupply	No	Yes
cfgIPv6LanNetworking	Yes	Yes
cfgIpv6StaticLanNetworking		
cfgIPv6URL	Yes	Yes
cfgIpmiSerial	No	Yes
cfgSmartCard	Yes	Yes
cfgNetTuning	No	Yes
cfgSensorRedundancy	No	Yes
cfgVFlashSD	Yes	Yes
cfgVFlashPartition	Yes	Yes
cfgLogging	Yes	Yes
cfgRacSecurity	Yes	Yes

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 cfgDNSServersFromDHCP 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
Default	514

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.

iDRAC Specific User Privilege	Privilege Bit Mask
Log in to iDRAC	0x00000001
Configure iDRAC	0x00000002
Configure Users	0x00000004
Clear Logs	0x00000008
Execute Server Control Commands	0x00000010
Access Virtual Console	0x00000020
Access Virtual Media	0x00000040
Test Alerts	0x00000080

Execute Debug Commands	0x00000100
CMC Specific User Privilege	
CMC Login User	0x0000001
Chassis Configuration Administrator	0x0000002
User Configuration Administrator	0x0000004
Clear Logs Administrator	0x0000008
Chassis Control Administrator	0x0000010
Super User	0x0000020
Server Administrator	0x0000040
Test Alert User	0x0000080
Debug Command Administrator	0x0000100
Fabric A Administrator	0x0000200
Fabric B Administrator	0x0000400
Fabric C Administrator	0x0000800

Examples

The following table provides sample privilege bit masks for users with one or more privileges.

User Privileges	Privilege Bit Mask
The user is not allowed to access iDRAC or CMC	0x00000000
The user may only log in to iDRAC or CMC and view iDRAC or CMC and server configuration information.	0x00000001

The user may log in to iDRAC or CMC and change configuration.	0x00000001 + 0x00000002 = 0x00000003
The user may log in to iDRAC, access Virtual Media, and Virtual Console.	0x00000001 + 0x00000040 + 0x00000080 = 0x000000C1

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.
Default	********

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)
Default	0

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
Default	57600

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 value:	^ 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, [,], \ In the input command, use \ without the quotes. For example: `config -g cfgSerial -o cfgSerialConsoleQuitKey "SHIFT+6"\\`
Default:	<Ctrl> \

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=^\
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. 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

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

cfgRacTuneIpRangeEnable (Read or Write)

Description	Enables or disables the IPv4 Address Range validation feature.
Legal Values	• 1 (TRUE) • 0 (FALSE)
Default	0

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) • 0 (FALSE)
Default	1

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)
Default	0

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 to1, 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:. **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. **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 cfgADDcSrvLookupDomainName 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)

Description	Enables or disables LDAP service. If this property is disabled, local iDRAC authentication is used for user logins.
Legal Values	• 1 — Enable • 0 — Disable
Default	0

cfgLDAPServer (Read or Write)

Description	Configures the address of the LDAP Server. IPv4 and IPv6 are supported. **NOTE:** You can specify multiple servers by separating each server with a comma. For example, example.com, sub1.example.com
Legal Values	String. Maximum length = 1024
Default	Null

cfgLDAPPort (Read or Write)

Description	Port of LDAP over SSL. Non-SSL port is not supported.
Legal Values	1–65535
Default	636

cfgLDAPBaseDN (Read or Write)

Description	The domain name of the branch of the directory where all searches must start.
Legal Values	String. Maximum length = 254
Default	Null

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	[null]

cfgLDAPSRVLookupServiceName (Read or Write)

Description	To use in the SRV lookup, configure the service name.
Legal Values	String of maximum length of 254 characters.
Default	LDAP

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` — a 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)

Description	Index of the Role Group as recorded in the Active Directory.
Legal Values	An integer from 1 to 5
Default	`<instance>`

cfgSSADRoleGroupName (Read or Write)

Description	Name of the Role Group as recorded in the Active Directory forest.
Legal Values	Any printable text string of up to 254 characters, with no white space.
Default	`<blank>`

cfgSSADRoleGroupDomain (Read or Write)

Description	Active Directory Domain in which the Role Group resides.
Legal Values	Any printable text string of up to 254 characters, with no white space.
Default	`<blank>`

cfgSSADRoleGroupPrivilege (Read 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	0x00000000 to 0x000001ff

Default	<blank>

- **Example**

```
racadm getconfig -g cfgStandardSchema -i 1
```

```
# cfgSSADRoleGroupIndex=1
cfgSSADRoleGroupName=blsys-1
cfgSSADRoleGroupDomain=
cfgSSADRolGroupPrivilege=3081
```

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

Role Group Privilege	Bit Mask
Login to iDRAC	0x00000001
Configure iDRAC	0x00000002
Configure Users	0x00000004
Clear Logs	0x00000008
Execute Server Control Commands	0x00000010
Access Virtual Console	0x00000020
Access Virtual Media	0x00000040
Test Alerts	0x00000080
Execute Debug Commands	0x00000100

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)

Description	Configures the enhanced cooling mode.
Legal Values	• `1` — Enabled • `0` — Disabled
Default	0 — Disabled

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	0000000000000000000000000000000000000000

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)

Default	0

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 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 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. 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 cumulative power consumption.

cfgServerCumulativePowerClear (Write Only)

Description	Clears the `cfgServerCumulativePowerConsumption` and `cfgServerCumulativePowerConsumptionTimeStamp` values.
Legal Values	1
Default	None

cfgServerPowerPCIeAllocation (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. **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.
Legal Values	Integer 1–8
Default	None

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. **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`. **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. **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	:

cfgIPv6DNSServersFromDHCP6 (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 `cfgIPv6DNSServersFromDHCP6` is set to `0` (false).

Legal Values	A string representing a valid IPv6 entry. For example, `2001:DB8:1234:5678:9ABC:DE11:C00C:BEEF`
Default	" :: "

cfgIPv6DNSServer2 (Read 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`

cfgIpv6StaticLanNetworking

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 `cfgNicUseDhcp` is set to 0 (false).
Legal Values	Any IPv6 address
Default	

cfgIPv6StaticGateway (Read or Write)

Description	Returns or sets gateway static IPv6 address.
Legal Values	Any IPv6 address
Default	

cfgIPv6StaticPrefixLength (Read or Write)

Description	The prefix length for static IPv6 address 1.
Legal Values	0–128
Default	64

cfgIPv6StaticAutoConfig (Read/Write)

Description	Enables or disables the static IPv6 AutoConfig option.
Legal Values	• 0 — Disabled • 1 — Enabled
Default	1 — Enabled

NOTE: If this object is modified, then the object `cfgIPv6Autoconfig` is also modified.

cfgIPv6StaticDNSServersFromDHCP6 (Read or Write)

Description	Specifies the DNS server static IP addresses.
Legal Values	• 0 — DNS Server must be configured as static. • 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	

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)

Default	1

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 thecfgNetTuningNicAutoNeg 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 • Lost • Degraded
Default	None

cfgVFlashSD

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**

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)

Description	Specifies the SSL asymmetric key size for the CSRs.
Legal Values	1024, 2048
Default	2048

4

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 FQDD or FQDD 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.
Usage                     -- NoRetry - 0;1Retry - 1; 2Retries - 2;3Retries -
3;4Retries - 4; 5Retries - 5;6Retries- 6; IndefiniteRetries, Default - NoRetry
Required License          -- RACADM
Dependency                -- None
```

```
BootStrapType             -- Specify the boot strap method used to boot to the
operating system.
Usage                     -- AutoDetect - 0;BBS - 1; Int18h - 2; Int19h- 3; Default -
AutoDetect
Required License          -- RACADM
Dependency                -- None

HideSetupPrompt           -- Specifies whether to display or hide the legacy Option
ROM setup prompt during system Power On Self Test (POST).
Usage                     -- Enabled; Disabled; Default - Disabled
Required License          -- RACADM
Dependency                -- None

LegacyBootProto           -- Select a non-UEFI network boot protocol
Usage                     -- PXE; iSCSI; FCoE; NONE; iSCSIPrimary; iSCSISecondary
Required License          -- RACADM
Dependency                -- None
```

```
LnkSpeed                  -- Specifies the port speed used for the selected boot
protocol
Usage                     -- AutoNeg; 10Mbps Half; 10Mbps Full; 100Mbps Half; 100Mbps
Full
Required License          -- RACADM
Dependency                -- None

NumberVFAdvertised        -- The number of PCI Virtual Functions (VFs) to be
advertised on this port in non-NPAR mode.
Usage                     -- Values from 0 - 256, Default - 0
Required License          -- RACADM
Dependency                -- VLanMode has to be Enabled

VLanId                    -- Specifies the ID (tag) for the VLAN Mode. VLAN ID must
be in the range from 0 to 4095
Usage                     -- Values from 1 - 4095
Required License          -- RACADM
Dependency                -- VLanMode has to be Enabled
```

```
VLanMode                  -- Virtual LAN mode enables use of a VLAN tag to be used by
[vendor defined boot protocols]
Usage                     -- Enabled; Disabled
Required License          -- RACADM
Dependency                -- None

WakeOnLan                 -- Enables the server to be powered on using an in-band
magic packet
Usage                     -- Enabled; Disabled
Required License          -- RACADM
Dependency                -- None

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
```

- 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/tmp #
```

- 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.IPMILan
- iDRAC.IPMISerial
- iDRAC.IPMISOL
- iDRAC.IPv4
- iDRAC.IPv4Static
- iDRAC.IPv6
- iDRAC.IPv6Static
- iDRAC.IPv6URL
- iDRAC.LDAP
- iDRAC.LDAPRoleGroup
- iDRAC.LocalSecurity
- iDRAC.Logging
- iDRAC.NIC
- iDRAC.NICStatic
- 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.vflashsd
- 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.HBAConfig
- FC.PortConfig
- NIC.ConfigureFormn
- NIC.DCBSettings
- NIC.DeviceLevelConfig
- NIC.FCOECapabilities
- NIC.FCoEConfiguration
- NIC.FCoEGenParams
- NIC.FrmwImgMenu
- NIC.GlobalBandwidthAllocation
- NIC.IscsiFirstTgtParams
- NIC.IscsiGenParams
- NIC.IscsiInitiatorParams
- NIC.IscsiSecondaryDeviceParams
- NIC.IscsiSecondTgtParams
- NIC.NICConfig
- NIC.NICPartitioningConfig
- NIC.VndrConfigGroup
- Storage.Controller
- Storage.enclosure

- Storage.PhysicalDisk
- Storage.VirtualDisk

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
Write Privilege	Server Control
License Required	Base
Dependency	ChassisMangamentAt server object.

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
Default Value	Not Applicable
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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`
Write Privilege	• Configure iDRAC • Configure User
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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
Default Value	0
Write Privilege	Configure iDRAC
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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
Dependency	None

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

System.Power.Cap.ActivePolicy.Btuhr (Read Only)

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
Dependency	Enable `System.Power.Cap.Enable`

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**. **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
Dependency	None

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
Default Value	Maximum power value during the last week.
Write Privilege	Not Applicable
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

System.Power.Max.LastWeek.TimeStamp (Read Only)

Description	Displays the timestamp of maximum power value during the last week.
Legal Values	String of up to 254 ASCII characters
Default Value	Timestamp of the maximum power value during the last week.
Write Privilege	Not Applicable
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

System.Power.Max. Power (Read Only)

Description	The server consumes maximum power, because the last value was cleared.
Legal Values	Values: 1–65535
Default Value	Peak power consumption of the server.
Write Privilege	Configure iDRAC
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

System.Power.Max.Power.Timestamp (Read Only)

Description	Displays time of maximum power consumption.
Legal Values	String of up to 254 ASCII characters
Default Value	Timestamp of the peak power consumption of the server.
Write Privilege	Configure iDRAC
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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

Default Value	Timestamp of the minimum power value during the last week.
Write Privilege	Not Applicable
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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.

System.Power.Supply.CurrentDraw (Read Only)

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
Default Value	0
Write Privilege	Not Applicable
License Required	Not Applicable
Dependency	Not Applicable

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
Write Privilege	Not Applicable

License Required	Not Applicable
Dependency	Not Applicable

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
Write Privilege	Not Applicable
License Required	Not Applicable
Dependency	Not Applicable

System.Power.Supply.[i].LineStatus (Read Only)

Description	Specifies if this power supply is powered off or on.
Legal Values	Integer > 0
Default	None
Write Privilege	Not Applicable
License Required	Not Applicable
Dependency	Not Applicable

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. **NOTE:** This attribute is platform dependent.
Legal Values	• 0 — 40°C • 1 —45°C • 2 — 50°C • 3 — 55°C • 255 — None
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. **NOTE:** This attribute is platform dependent.
Legal Values	Integral Values: 0 – 100
Default Value	0
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

System.ThermalSettings.FanSpeedMediumOffsetVal (Read Only)

Description	Indicates the percentage range for medium fan speed offset. **NOTE:** This attribute is platform dependent.
Legal Values	Integral Values: 0 – 100
Default Value	0
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

System.ThermalSettings.FanSpeedHighOffsetVal (Read Only)

Description	Indicates the percentage range for the high fan offset speed. **NOTE:** This attribute is platform dependent.
Legal Values	Integral Values: 0 – 100
Default Value	0
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

System.ThermalSettings.FanSpeedMaxOffsetVal (Read Only)

Description	Indicates the percentage range for low fan offset speed. **NOTE:** This attribute is platform dependent.
Legal Values	Integral Values: 0 – 100
Default Value	0
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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 • 1 — Enabled
Default Value	Enabled
Write Privilege	Configure iDRAC
License Required	Not Applicable
Dependency	None

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
Default Value	1 — Yes
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

LifecycleController.LCAttributes

The following section provides information about the objects in the `LifecycleController.LCAttributes` group.

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.autoupdate (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
Dependency	None

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 ACSII 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
Dependency	None

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 ACSII 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 controller1.
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

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 • IPv6.DNS2

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
Write Privilege	Configure iDRAC
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 • 2 — Standard Schema
Default Value	1 — Extended Schema
Write Privilege	Configure iDRAC
License Required	iDRAC Enterprise
Dependency	None

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 • 1 — Enabled
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 Vlaue	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
Dependency	IOIDOptEnable attribute must be enabled.

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.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
Dependency	None

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	00000000000000000000000000000000000000000000
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 • 4 — Administrator
Default Value	4 — Administrator

Write Privilege	Configure iDRAC
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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)

Description	The subnet mask used for the iDRAC IPv4 address.
Legal Values	Valid IPv4 netmask
Default Value	`255.255.255.0`
Write Privilege	Configure iDRAC
License Required	iDRAC Express or iDRAC Enterprise
Dependency	Cannot be set unless `IPv4.DHCPEnable` is disabled.

iDRAC.IPv4Static

Use the objects in this group to manage the IPv4 Static configuration properties of iDRAC.

iDRAC.IPv4Static.Address (Read or Write)

Description	iDRAC static IPv4 address. This address can be configured even when DHCP is enabled.
Legal Values	Valid IPv4 Address
Default Value	`192.168.0`
Write Privilege	Configure iDRAC
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

iDRAC.IPv4Static.DNS1 (Read or Write)

Description	Statically configurable 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	None

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 • 1 — Enabled
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
Default Value	::
Write Privilege	Configure iDRAC
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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
Dependency	None

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	
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)

Description	Port of LDAP over SSL.
Legal Values	Integer values: 1–65535
Default Value	636
Write Privilege	Configure iDRAC
License Required	iDRAC Enterprise
Dependency	None

iDRAC.LDAP.SearchFilter (Read or Write)

Description	A valid LDAP search filter to be used if the user attribute cannot uniquely identify the login user within the chosen baseDN.
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.Server (Read or Write)

Description	Configures the address of the LDAP Server.
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.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)

Description	To configure iDRAC from Local RACADM, enable or disable the ability of the local user.
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)

Description	To configure iDRAC from the BIOS POST option-ROM, enable or disable the ability of the local user.
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)

Description	Enables or disables the ability of Logging SEL Records with OEM.
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 • 1 — Enabled
Default Value	0 — Disabled
Write Privilege	Configure iDRAC
License Required	iDRAC Express or iDRAC Enterprise
Dependency	This object is writable only when NIC Selection is in shared mode.

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
Default Value	0 — Disabled
Write Privilege	Configure iDRAC
License Required	iDRAC Express or iDRAC Enterprise
Dependency	Can be Enabled only if the following are enabled: • `IPv4.Enable` and `IPv4.DHCPEnable` • `IPv6.Enable` and `IPv6.AutoConfig`

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
Dependency	None

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
Dependency	None

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.SharedNICScanTime (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. • `iDRAC.IPv4.Enable`, `iDRAC.IPv4.DHCPEnable`, `iDRAC.IPv6.Enable`, and `iDRAC.IPv6.AutoConfig` must be enabled.
Legal Values	• 0 — 10 • 1 — 100 • 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	• 0 — Disabled • 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
Write Privilege	Configure iDRAC
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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
Dependency	None

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 — lom-p2p • 1 — usb-p2p
Default Value	0 — lom-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	• 0 — Attached • 1 — Detached
Default Value	1 — Detached
Write Privilege	Configure iDRAC
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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**.

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
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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
Default Value	Not Applicable
Write Privilege	Configure iDRAC
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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
Dependency	None

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
Default Value	1 — Enabled
Write Privilege	Configure iDRAC

License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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 for SNMP traps.
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 — SNMPv2 • 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 configures 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 ACSII 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 ACSII 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 ACSII 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
Dependency	None

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
Write Privilege	Configure iDRAC
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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 user name 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
Write Privilege	Login and configure iDRAC

License Required	iDRAC Enterprise
Dependency	vFlash SD card must be enabled.

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	• None • AES
Default Value	AES
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
Dependency	None

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.FloppyEmulation (Read or Write)

Description	Enables of 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
License Required	iDRAC Enterprise
Dependency	None

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.WebServer.HttpsPort (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	Not Applicable

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 `SetLegacyHddOrderFqdd`, 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.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 OS • Disabled
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
Dependency	None

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)

Description	Enables or disables the integrated network card 2.
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)

Description	Enables or disables the integrated RAID controller.
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)

Description	Enables or disables the integrated SAS controller.
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)

Description	Enables or disables the low-power mode of the memory.
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)

Description	Current memory operating mode.
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)

Description	Configure the memory optimizer setting.
Legal Values	• Enabled • Disabled
Default Value	Not Applicable
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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 • Dddc
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
Default Value	Not Applicable
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	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
Default Value	Not Applicable
License Required	RACADM
Dependency	None

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
Dependency	None

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
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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. For the attribute `PxeDevnEnDis`, the value of `n` can be 2 — 4.
Legal Values	• Enabled • Disabled
Default Value	None
Write Privilege	Server Control

License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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)

Description	Provides the processor brand name.
Legal Values	None
Default Value	Not Applicable
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

BIOS.ProcSettings.Proc1ControlledTurbo (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.Proc1Id (Read or Write)

Description	Provides the 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.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
Default Value	Not Applicable
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	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	Not Applicable

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
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

BIOS.ProcSettings.Proc2L2Cache (Read or Write)

Description	AmountBIOS.ProcSettings.Proc2L2Cache (Read Only) 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
Default Value	Not Applicable
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	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. **NOTE:** You can enable this option only when System Profile is set to Performance.
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
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.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)

Description	Bus 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.ProcConfigTdp (Read or Write)

Description	Allows to re-configure the Thermal Design Power (TDP) to lower levels.
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)

Description	Controls the number of enabled cores in each processor.
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.
Legal Values	• Unknown • None • Pxe • Iscsi
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)

Description	Indicates the NIC Interface used for the specified PXE device. For the attribute `PxeDevnInterface`, 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.PxeDevnProtocol (Read or Write)

Description	Controls the PXE protocol used for the specified PXE device. For the attribute `PxeDevnProtocol`, the value of `n` can be 1 — 4.
Legal Values	• IPv4 • IPv6
Default Value	None
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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)

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.SataPortAModel (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.SataPortB (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.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`.

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

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)

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.SataPortEModel (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.SataPortF (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.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
Dependency	None

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)

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.SataPortIModel (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.SataPortJ (Read or Write)

Description	Sets the drive type of the selected device. When the Embedded SATA setting is in: • 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. • 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.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
Default Value	Not Applicable
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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
Default Value	Not Applicable
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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. **NOTE:** The clearing can affect starting the operating system..
Legal Values	• None • Activate • Deactivate • Clear

Default Value	Not Applicable
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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
Dependency	None

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 <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

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.HBAConfig

The objects in this group manage the Fibre Channel Host Bus Adapter (HBA).

FC.HBAConfig.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.HBAConfig.FabricLoginTimeout (Read or Write)

Description	Sets the SAN Fabric 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.HBAConfig.FabricLoginRetryCount (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.HBAConfig.FramePayloadSize (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.HBAConfig.HardZone (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
Write Privilege	Not Applicable

License Required	iDRAC Express or iDRAC Enterprise
Dependency	Not Applicable

FC.PortConfig.FCDevice (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

License Required	iDRAC Express or iDRAC Enterprise
Dependency	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	Sever 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
Write Privilege	Not Applicable

License Required	iDRAC Express or iDRAC Enterprise
Dependency	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 • Disabled

Default Value	Disabled
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	Not Applicable

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
Dependency	Not Applicable

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

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

NOTE: For Emulex cards, the `VirtualizationMode` attribute is found under the `VndrConfigPage` group instead of the `DeviceLevelConfig` group.

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)

Description	Indicates the maximum number of exchanges supported.
Legal Values	None
Default Value	Not Applicable
Write Privilege	Not Applicable
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

NIC.FCOECapabilities.MaxNumberLogins (Read Only)

Description	Indicates the maximum number of logins supported per port.
Legal Values	None
Default Value	Not Applicable
Write Privilege	Not Applicable
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

NIC.FCOECapabilities.MaxNumberOfFCTargets (Read Only)

Description	Indicates the maximum number of FC targets supported.
Legal Values	None
Default Value	Not Applicable
Write Privilege	Not Applicable
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

NIC.FCoEConfiguration.BootOrderFirstFCoETarget (Read or Write)

Description	Specifies the port's target in the FCoE boot order.
Legal Values	Not Applicable
Default Value	0
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	Not Applicable

NIC.FCoEConfiguration.BootOrderSecondFCoETarget (Read or Write)

Description	Specifies the port's second defined target in the FCoE boot.
Legal Values	Not Applicable
Default Value	0
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	Not Applicable

NIC.FCoEConfiguration.BootOrderThirdFCoETarget (Read or Write)

Description	Specifies the port's third defined target in the FCoE boot.
Legal Values	Not Applicable
Default Value	0
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	Not Applicable

NIC.FCoEConfiguration.BootOrderFourthFCoETarget (Read or Write)

Description	Specifies the port's fourth defined target in the FCoE boot.
Legal Values	Not Applicable
Default Value	0
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	Not Applicable

NIC.FCoEConfiguration.FirstFCoEBootTargetLUN (Read or Write)

Description	LUN of the first FCoE storage target that the FCoE initiator will start the system from when Connect attribute is enabled.
Legal Values	None
Default Value	Not Applicable
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	Enable `FCoEConfiguration.ConnectFirstFCoETarget`

NIC.FCoEConfiguration.FirstFCoEFCFVLANID (Read or Write)

Description	VLAN ID uses the first FC storage target to connect.
Legal Values	None
Default Value	Not Applicable
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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 • 5 — Specified LUN
Default Value	0 — Disabled
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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
Default Value	Not Applicable
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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
License Required	iDRAC Express or iDRAC Enterprise
Dependency	Not Available if `VndrConfigGroup.iSCSIBootSupport` is Unavailable.

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
License Required	iDRAC Express or iDRAC Enterprise
Dependency	Not Available if `VndrConfigGroup.iSCSIBootSupport` is Unavailable.

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
License Required	iDRAC Express or iDRAC Enterprise
Dependency	Not Available if `VndrConfigGroup.iSCSIBootSupport` is Unavailable.

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
License Required	iDRAC Express or iDRAC Enterprise
Dependency	Not Available if `VndrConfigGroup.iSCSIBootSupport` is Unavailable.

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
Dependency	None

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)

Description	Controls whether IPv4 or IPv6 network addressing is used for iSCSI initiator and targets.
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)

Description	Specifies whether or not the iSCSI initiator will boot to the specified iSCSI target after connection.
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)

Description	Enables the acquisition of iSCSI target 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.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
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	Not Available if `VndrConfigGroup.iSCSIBootSupport` is Unavailable.

NIC.IscsiGenParams.TcpIpViaDHCP (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 `IscsiGenParams.IpVer` is set to 'IPv6' and `VndrConfigGroup.iSCSIBootSupport` is Unavailable.

NIC.IscsiGenParams.TcpTimestmp (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 `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
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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
Dependency	Not Available if `VndrConfigGroup.iSCSIBootSupport` is Unavailable.

NIC.IscsiInitiatorParams.IscsiInitiatorIpAddr (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.IscsiInitiatorParams.IscsiInitiatorName (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.IscsiInitiatorParams.IscsiInitiatorPrimDns (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
Dependency	Not available if `VndrConfigGroup.iSCSIBootSupport` is unavailable.

NIC.IscsiSecondTgtParams

To configure the `iSCSIsecond` 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
License Required	iDRAC Express or iDRAC Enterprise
Dependency	Not available if `VndrConfigGroup.iSCSIBootSupport` is unavailable.

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
Dependency	Not Applicable

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 • iSCSIPrimary • 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
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise

Dependency	None

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.BlnkLeds (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
Default Value	Not Applicable
Write Privilege	Not Applicable
License Required	iDRAC Express or iDRAC Enterprise
Dependency	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
Write Privilege	Not Applicable
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

NIC.VndrConfigGroup.ISCSIMacAddr (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
Default Value	Not Applicable
Write Privilege	Not Applicable
License Required	iDRAC Express or iDRAC Enterprise
Dependency	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 • HBA
Default value	RAID
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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

Storage.Controller.PatrolReadUnconfiguredArea (Read or Write)

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

Storage.Controller.PossibleloadBalancedMode (Read or Write)

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

Storage.Controller.RebuildRate (Read or Write)

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

Storage.Controller.ReconstructRate (Read or Write)

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
Default value	100
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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	RACADM
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	
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
Dependency	Backplane must support.

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

License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

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	WriteBack
Write Privilege	Server Control
License Required	iDRAC Express or iDRAC Enterprise
Dependency	None

A

Deprecated and New Subcommands

The following table provides the list of deprecated subcommands and equivalent new subcommands.

Deprecated Subcommands	New Subcommands
getconfig	get
config	set
getuscversion	getversion
raid	storage

NOTE: The following attributes are obsoleted and these attributes do not support the **ipBlocking** feature:

- ipBlockingEnabled
- ipBlockingFailCount
- ipBlockingFailWindow
- ipBlockingPenaltyTime

B

Legacy and New Groups and Objects

The following table provides the list of legacy groups and objects and equivalent groups and objects.

Legacy Groups and Objects	New Groups and Objects
idRacInfo	**iDRAC.Info**
idRacType	Type
idRacProductInfo	Product
idRacDescriptionInfo	Description
idRacVersionInfo	Version
idRacBuildInfo	Build
idRacName	Name
cfgActiveDirectory	**iDRAC.ActiveDirectory**
cfgADEnable	Enable
cfgADRacDomain	RacDomain
cfgADRacName	RacName
cfgADAuthTimeout	AuthTimeout
cfgADType	Schema
cfgADDomainController1	DomainController1
cfgADDomainController2	DomainController2
cfgADDomainController3	DomainController3
cfgADGlobalCatalog1	GlobalCatalog1
cfgADGlobalCatalog2	GlobalCatalog2
cfgADGlobalCatalog3	GlobalCatalog3
cfgADCertValidationEnable	CertValidationEnable
cfgADSSOEnable	SSOEnable
cfgADDcSRVLookupEnable	DCLookupEnable
cfgADDcSRVLookupbyUserdomain	DCLookupByUserDomain
cfgADDcSRVLookupDomainName	DCLookupDomainName
cfgADGcSRVLookupEnable	GCLookupEnable

Legacy Groups and Objects	New Groups and Objects
cfgADGcRootDomain	GCRootDomain
cfgLanNetworking	**iDRAC.Nic**
cfgNicEnable	Enable
cfgNicMacAddress	MACAddress
cfgDNSRacName	DNSRacName
cfgNicSelection	Selection
cfgNicFailoverNetwork	Failover
cfgDNSDomainName	DNSDomainName
cfgDNSDomainNameFromDHCP	DNSRacName
cfgDNSRegisterRac	DNSRegister
cfgNicVLanEnable	VLanEnable
cfgNicVLanID	VLanID
cfgNicVLanPriority	VLanPriority
	iDRAC.IPv4
cfgNicIPv4Enable	Enable
cfgNicIpAddress	Address
cfgNicNetmask	NetMask
cfgNicGateway	Gateway
cfgNicUseDhcp	DHCPEnable
cfgDNSServersFromDHCP	DNSFromDHCP
cfgDNSServer1	DNS1
cfgDNSServer2	DNS2
cfgIpv6LanNetworking	**iDRAC.IPv6**
cfgIPv6Enable	Enable
cfgIPv6Address1	Address1
cfgIPv6Gateway	Gateway
cfgIPv6PrefixLength	PrefixLength
cfgIPv6AutoConfig	AutoConfig
cfgIPv6LinkLocalAddress	LinkLocalAddress
cfgIPv6Address2	Address2

Legacy Groups and Objects	New Groups and Objects
cfgIPv6Address3	Address3
cfgIPv6Address4	Address4
cfgIPv6Address5	Address5
cfgIPv6Address6	Address6
cfgIPv6Address7	Address7
cfgIPv6Address8	Address8
cfgIPv6Address9	Address9
cfgIPv6Address10	Address10
cfgIPv6Address11	Address11
cfgIPv6Address12	Address12
cfgIPv6Address13	Address13
cfgIPv6Address14	Address14
cfgIPv6Address15	Address15
cfgIPv6DNSServersFromDHCP6	DNSFromDHCP6
cfgIPv6DNSServer1	DNS1
cfgIPv6DNSServer2	DNS2
cfgServerPower	**System.Power**
cfgServerPowerStatus	Status
cfgServerActualPowerConsumption	Realtime.Power
cfgServerMinPowerCapacity	Cap.MinThreshold
cfgServerMaxPowerCapacity	Cap.MaxThreshold
cfgServerPeakPowerConsumption	Max.Power
cfgServerPeakPowerConsumptionTimestamp	Max.Power.Timestamp
cfgServerPowerConsumptionClear	Max.PowerClear
cfgServerPowerCapWatts	Cap.Watts
cfgServerPowerCapBtuhr	Cap.BtuHr
cfgServerPowerCapPercent	Cap.Percent
cfgServerPowerCapEnable	Cap.Enable
cfgServerPowerLastHourAvg	Avg.LastHour
cfgServerPowerLastDayAvg	Avg.LastDay

Legacy Groups and Objects	New Groups and Objects
cfgServerPowerLastWeekAvg	Avg.LastWeek
cfgServerPowerLastHourMinPower	Min.LastHour
cfgServerPowerLastHourMinTime	Min.LastHour.Timestamp
cfgServerPowerLastHourMaxPower	Max.LastHour
cfgServerPowerLastHourMaxTime	Max.LastHour.Timestamp
cfgServerPowerLastDayMinPower	Min.LastDay
cfgServerPowerLastDayMinTime	Min.LastDay.Timestamp
cfgServerPowerLastDayMaxPower	Max.LastDay
cfgServerPowerLastDayMaxTime	Max.LastDay.Timestamp
cfgServerPowerLastWeekMinPower	Min.LastWeek
cfgServerPowerLastWeekMinTime	Min.LastWeek.Timestamp
cfgServerPowerLastWeekMaxPower	Max.LastWeek
cfgServerPowerLastWeekMaxTime	Max.LastWeek.Timestamp
cfgServerPowerInstHeadroom	Realtime.Headroom
cfgServerPowerPeakHeadroom	Max.Headroom
cfgServerActualAmperageConsumption	Realtime.Amps
cfgServerPeakAmperage	Max.Amps
cfgServerPeakAmperageTimeStamp	Max.Amps.Timestamp
cfgServerCumulativePowerConsumption	EnergyConsumption
cfgServerCumulativePowerConsumptionTimeStamp	EnergyConsumption.StarttimeStamp
cfgServerCumulativePowerClear	EnergyConsumption.Clear
cfgServerPowerPicEAllocation	PCIePowerAllocation
cfgServerPowerSupply	**System.Power.Supply**
cfgServerPowerSupplyIndex	Index
cfgServerPowerSupplyInputStatus	LineStatus
cfgServerPowerSupplyMaxInputPower	MaxInputPower
cfgServerPowerSupplyMaxOutputPower	MaxOutputPower
cfgServerPowerSupplyOnlineStatus	Status
cfgServerPowerSupplyFwVer	FwVer
cfgServerPowerSupplyCurrentDraw	CurrentDraw

Legacy Groups and Objects	New Groups and Objects
cfgServerPowerSupplyType	Type
cfgServerPowerBusMonitoring	PMBusMonitoring
cfgUserAdmin	**iDRAC.Users**
cfgUserAdminIndex	NA
cfgUserAdminUserName	UserName
cfgUserAdminPassword	Password
cfgUserAdminEnable	Enable
cfgUserAdminPrivilege	Privilege
cfgUserAdminIpmiLanPrivilege	IpmiLanPrivilege
cfgUserAdminIpmiSerialPrivilege	IpmiSerialPrivilege
cfgUserAdminSolEnable	SolEnable
cfgRemoteHosts	**iDRAC.SysLog**
cfgRhostsSyslogEnable	SysLogEnable
cfgRhostsSyslogServer1	Server1
cfgRhostsSyslogServer2	Server2
cfgRhostsSyslogServer3	Server3
cfgRhostsSyslogPort	Port
	iDRAC.Update
cfgRhostsFwUpdateTftpEnable	FwUpdateTFTPEnable
cfgRhostsFwUpdateIpAddr	FwUpdateIPAddr
cfgRhostsFwUpdatePath	FwUpdatePath
	[iDRAC.RemoteHosts]
cfgRhostsSmtpServerIpAddr	SMTPServerIPAddress
cfgEmailAlert	**iDRAC.EmailAlert**
cfgEmailAlertIndex	NA
cfgEmailAlertEnable	Enable
cfgEmailAlertAddress	Address
cfgEmailAlertCustomMsg	CustomMsg
cfgSessionManagement	
cfgSsnMgtTelnetIdleTimeout	**iDRAC.Telnet**

Legacy Groups and Objects	New Groups and Objects
	Enable
	Port
	Timeout
cfgSsnMgtSshIdleTimeout	**iDRAC.SSH**
	Enable
	Port
	Timeout
cfgSsnMgtRacadmTimeout	**iDRAC.Racadm**
	Enable
	Timeout
cfgSsnMgtConsRedirMaxSessions	**iDRAC.VirtualConsole**
	EncryptEnable
	Enable
	PluginType
	LocalVideo
	Port
	MaxSessions
	Timeout
	AccessPrivilege
cfgSsnMgtWebserverTimeout	**iDRAC.Webserver**
	Enable
	HttpPort
	Timeout
	HttpsPort
	LowerEncryptionBitLength
[cfgSerial]	**iDRAC.Serial**
cfgSerialBaudRate	BaudRate
cfgSerialConsoleEnable	Enable
cfgSerialConsoleIdleTimeout	IdleTimeout
cfgSerialConsoleNoAuth	NoAuth

Legacy Groups and Objects	New Groups and Objects
cfgSerialConsoleCommand	Command
cfgSerialHistorySize	HistorySize
	iDRAC.SerialRedirection
cfgSerialConsoleQuitKey	QuitKey
cfgSerialCom2RedirEnable	Enable
cfgSerialTelnetEnable	**iDRAC.Telnet**
cfgSerialSshEnable	**iDRAC.SSH**
[cfgOobSnmp]	**iDRAC.SNMP**
cfgOobSnmpAgentEnable	AgentEnable
cfgOobSnmpAgentCommunity	AgentCommunity
[cfgNetTuning]	
cfgNetTuningNic100MB	**iDRAC.Nic**
cfgNetTuningNicFullDuplex	**iDRAC.Nic**
cfgNetTuningNicMtu	**iDRAC.Nic**
cfgNetTuningNicAutoneg	**iDRAC.Nic**
[cfgRacTuning]	
cfgRacTuneRemoteRacadmEnable=1	**iDRAC.Racadm**
cfgRacTuneWebserverEnable=1	**iDRAC.Webserver**
cfgRacTuneHttpPort=80	**iDRAC.Webserver**
cfgRacTuneHttpsPort=443	**iDRAC.Webserver**
cfgRacTuneTelnetPort=23	**iDRAC.Telnet**
cfgRacTuneSshPort=22	**iDRAC.SSH**
cfgRacTuneConRedirEnable=1	**iDRAC.VirtualConsole**
cfgRacTuneConRedirPort=5900	**iDRAC.VirtualConsole**
cfgRacTuneConRedirEncryptEnable=1	**iDRAC.VirtualConsole**
cfgRacTuneLocalServerVideo=1	**iDRAC.VirtualConsole**
	iDRAC.IPBlocking
cfgRacTuneIpRangeEnable=0	RangeEnable
cfgRacTuneIpRangeAddr=192.168.1.1	RangeAddr

Legacy Groups and Objects	New Groups and Objects
cfgRacTuneIpRangeMask=255.255.255.0	RangeMask
	iDRAC.Time
cfgRacTuneTimezoneOffset=0	TimeZoneOffset
cfgRacTuneDaylightOffset=0	DaylightOffset
cfgRacTuneAsrEnable=1	TBD
cfgRacTunePlugintype=0	**iDRAC.VirtualConsole**
	iDRAC.LocalSecurity
cfgRacTuneCtrlEConfigDisable=0	PrebootConfig
cfgRacTuneLocalConfigDisable=0	LocalConfig
cfgRacTuneVirtualConsoleAuthorizeMultipleSessions=0	**iDRAC.VirtualConsole**
ifcRacManagedNodeOs	**System.ServerOS**
ifcRacMnOsHostname	HostName
ifcRacMnOsOsName	OSName
cfgRacSecurity	**iDRAC.Security**
cfgRacSecCsrKeySize	CsrKeySize
cfgRacSecCsrCommonName	CsrCommonName
cfgRacSecCsrOrganizationName	CsrOrganizationName
cfgRacSecCsrOrganizationUnit	CsrOrganizationUnit
cfgRacSecCsrLocalityName	CsrLocalityName
cfgRacSecCsrStateName	CsrStateName
cfgRacSecCsrCountryCode	CsrCountryCode
cfgRacSecCsrEmailAddr	CsrEmailAddr
cfgRacVirtual	**iDRAC.VirtualMedia**
cfgVirMediaAttached	Attached
cfgVirtualBootOnce	BootOnce
cfgVirMediaFloppyEmulation	FloppyEmulation
cfgLDAP	**iDRAC.LDAP**
cfgLdapEnable	Enable
cfgLdapServer	Server
cfgLdapPort	Port

Legacy Groups and Objects	New Groups and Objects
cfgLdapBaseDN	BaseDN
cfgLdapUserAttribute	UserAttribute
cfgLdapGroupAttribute	GroupAttribute
cfgLdapGroupAttributeIsDN	GroupAttributeIsDN
cfgLdapBindDN	BindDN
# cfgLdapBindPassword	BindPassword
cfgLdapSearchFilter	SearchFilter
cfgLdapCertValidationEnable	CertValidationEnable
cfgLdapRoleGroup	**iDRAC.LDApRole**
cfgLdapRoleGroupIndex	NA
cfgLdapRoleGroupDN	DN
cfgLdapRoleGroupPrivilege	Privilege
cfgStandardSchema	**iDRAC.ADGroup**
cfgSSADRoleGroupIndex	NA
cfgSSADRoleGroupName	Name
cfgSSADRoleGroupDomain	Domain
cfgSSADRoleGroupPrivilege	Privilege
cfgIpmiSerial	**iDRAC.IPMISerial**
cfgIpmiSerialConnectionMode	ConnectionMode
cfgIpmiSerialBaudRate	BaudRate
cfgIpmiSerialFlowControl	FlowControl
cfgIpmiSerialChanPrivLimit	ChanPrivLimit
cfgIpmiSerialLineEdit	LineEdit
cfgIpmiSerialDeleteControl	DeleteControl
cfgIpmiSerialEchoControl	EchoControl
cfgIpmiSerialHandshakeControl	HandshakeControl
cfgIpmiSerialNewLineSequence	NewLineSeq
cfgIpmiSerialInputNewLineSequence	InputNewLineSeq
cfgIpmiSol	**iDRAC.IPMISol**
cfgIpmiSolEnable	Enable

Legacy Groups and Objects	New Groups and Objects
cfgIpmiSolBaudRate	BaudRate
cfgIpmiSolMinPrivilege	MinPrivilege
cfgIpmiSolAccumulateInterval	AccumulateInterval
cfgIpmiSolSendThreshold	SendThreshold
cfgIpmiLan	**iDRAC.IPMILan**
cfgIpmiLanEnable	Enable
cfgIpmiLanPrivilegeLimit	PrivLimit
cfgIpmiLanAlertEnable	AlertEnable
cfgIpmiEncryptionKey	EncryptionKey
cfgIpmiPetCommunityName	CommunityName
cfgUserDomain	**iDRAC.UserDomain**
cfgUserDomainIndex	NA
cfgUserDomainName	Name
cfgSmartCard	**iDRAC.SmartCard**
cfgSmartCardLogonEnable	SmartCardLogonEnable
cfgSmartCardCRLEnable	SmartCardCRLEnable
[cfgIPv6URL]	
cfgIPv6URLString	NA
cfgVFlashSD	**iDRAC.vFlashSD**
cfgVFlashSDSize	Size
cfgVFlashSDLicensed	Licensed
cfgVFlashSDAvailableSize	AvailableSize
cfgVFlashSDHealth	Health
cfgVFlashSDEnable	Enable
cfgVFlashSDWriteProtect	WriteProtect
cfgVFlashSDInitialized	Initialized
cfgVFlashPartition	**iDRAC.vFlashPartition**
cfgVFlashPartitionIndex	NA
cfgVFlashPartitionSize	Size

Legacy Groups and Objects	New Groups and Objects
cfgVFlashPartitionEmulationType	EmulationType
cfgVFlashPartitionFlashOSVolLabel	VolumeLabel
cfgVFlashPartitionFormatType	FormatType
cfgVFlashPartitionAccessType	AccessType
cfgVFlashPartitionAttachState	AttachState
cfgServerInfo	**iDRAC.ServerBoot**
cfgServerBootOnce	BootOnce
cfgServerFirstBootDevice	FirstBootDevice
cfgLogging	**iDRAC.Logging**
cfgLoggingSELOEMEventFilterEnable	SELOEMEventFilterEnable
	iDRAC.SNMP.Alert
cfgIpmiPetAlertEnable	Enable
cfgIpmiPetAlertDestIpAddr	DestAddr

Topics:

- cfgSSADRoleGroupPrivilege (Read or Write)

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

```
racadm getconfig -g cfgStandardSchema -i 1
```

```
# cfgSSADRoleGroupIndex=1
cfgSSADRoleGroupName=blsys-1
cfgSSADRoleGroupDomain=
cfgSSADRolGroupPrivilege=3081
```

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

Role Group Privilege	Bit Mask
Login to iDRAC	0x00000001
Configure iDRAC	0x00000002
Configure Users	0x00000004

Clear Logs	0x00000008
Execute Server Control Commands	0x00000010
Access Virtual Console	0x00000020
Access Virtual Media	0x00000040
Test Alerts	0x00000080
Execute Debug Commands	0x00000100