Hitachi Command Suite

Compute Systems Manager

CLI Reference Guide

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Preface

This manual describes how to use the Hitachi Compute Systems Manager (HCSM) CLI.

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Intended audience

This document provides instructions for server administrators.

Product version

This document revision applies to Hitachi Compute Systems Manager (HCSM) v8.1.4.

Release notes

Read the release notes before installing and using this product. They may contain requirements or restrictions that are not fully described in this document or updates or corrections to this document.

Referenced documents

The following referenced documents can be found on the applicable documentation CD:

- *Hitachi Command Suite Compute Systems Manager User Guide*, MK-91HC194
- *Hitachi Command Suite Compute Systems Manager Installation and Configuration Guide*, MK-91HC195
- *Hitachi Command Suite Compute Systems Manager Messages*, MK-91HC197
- *Hitachi Compute Systems Manager Release Notes*

Hitachi Data Systems Portal, https://portal.hds.com

Document conventions

This document uses the following typographic conventions:

Convention	Description
Bold	Indicates text on a window, other than the window title, including menus, menu options, buttons, fields, and labels. Example: Click **OK**.
Italic	Indicates a variable, which is a placeholder for actual text provided by the user or system. Example: `copy source-file target-file` **Note:** Angled brackets (< >) are also used to indicate variables.
`Monospace`	Indicates text that is displayed on screen or entered by the user. Example: `pairdisplay -g oradb`

Convention	Description
< > angled brackets	Indicates a variable, which is a placeholder for actual text provided by the user or system. Example: `pairdisplay -g <group>` **Note:** Italic font is also used to indicate variables.
[ ] square brackets	Indicates optional values. Example: [a | b] indicates that you can choose a, b, or nothing.
{ } braces	Indicates required or expected values. Example: { a | b } indicates that you must choose either a or b.
| vertical bar	Indicates that you have a choice between two or more options or arguments. Examples: [a | b] indicates that you can choose a, b, or nothing. { a | b } indicates that you must choose either a or b.

This document uses the following icons to draw attention to information:

Icon	Label	Description
⚠	Note	Calls attention to important or additional information.
💡	Tip	Provides helpful information, guidelines, or suggestions for performing tasks more effectively.
⚠	Caution	Warns the user of adverse conditions or consequences (for example, disruptive operations).
⚠	WARNING	Warns the user of severe conditions or consequences (for example, destructive operations).

Conventions for storage capacity values

Physical storage capacity values (for example, disk drive capacity) are calculated based on the following values:

Physical capacity unit	Value
1 kilobyte (KB)	1,000 (10^3) bytes
1 megabyte (MB)	1,000 KB or $1,000^2$ bytes
1 gigabyte (GB)	1,000 MB or $1,000^3$ bytes
1 terabyte (TB)	1,000 GB or $1,000^4$ bytes
1 petabyte (PB)	1,000 TB or $1,000^5$ bytes
1 exabyte (EB)	1,000 PB or $1,000^6$ bytes

Logical storage capacity values (for example, logical device capacity) are calculated based on the following values:

Logical capacity unit	Value
1 block	512 bytes
1 KB	1,024 (2^{10}) bytes
1 MB	1,024 KB or $1,024^2$ bytes
1 GB	1,024 MB or $1,024^3$ bytes
1 TB	1,024 GB or $1,024^4$ bytes
1 PB	1,024 TB or $1,024^5$ bytes
1 EB	1,024 PB or $1,024^6$ bytes

Accessing product documentation

Product user documentation is available on the Hitachi Data Systems Portal: https://portal.hds.com. Check this site for the most current documentation, including important updates that may have been made after the release of the product.

Getting help

Hitachi Data Systems Support Portal is the destination for technical support of your current or previously-sold storage systems, midrange and enterprise servers, and combined solution offerings. The Hitachi Data Systems customer support staff is available 24 hours a day, seven days a week. If you need technical support, log on to the Hitachi Data Systems Support Portal for contact information: https://portal.hds.com.

Hitachi Data Systems Community is a new global online community for HDS customers, partners, independent software vendors, employees, and prospects. It is an open discussion among these groups about the HDS portfolio of products and services. It is the destination to get answers, discover insights, and make connections. The HDS Community complements our existing Support Portal and support services by providing an area where you can get answers to non-critical issues and questions. **Join the conversation today!** Go to community.hds.com, register, and complete your profile.

Comments

Please send us your comments on this document to doc.comments@hds.com. Include the document title and number, including the revision level (for example, -07), and refer to specific sections and paragraphs whenever possible. All comments become the property of Hitachi Data Systems Corporation.

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Thank you!

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Command line interface overview

The Hitachi Compute Systems Manager command line interface (CLI) refers to commands that you can run remotely from a Compute Systems Manager management client to a Compute Systems Manager management server.

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About the CLI

You can use the Hitachi Compute Systems Manager CLI to do the following:
- Commands for using and configuring the CLI
- Commands for obtaining information about managed hosts
- Commands for controlling the power of managed hosts
- Command for using Deployment Manager

To use the CLI, you need to install it on the machine (management client) that is used to operate Compute Systems Manager. In addition, you need to log in to the machine (management server) where Compute Systems Manager is installed.

The following figure shows the components in a Compute Systems Manager system environment.
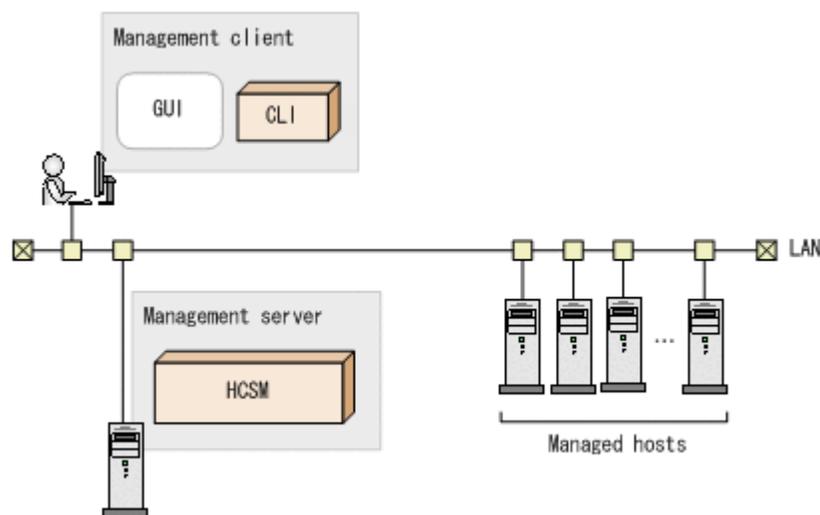
About CLI environment settings

The Compute Systems Manager CLI has two environment variables:
- HCSM_CLI_JRE_PATH
  Use this variable to specify the installation path to the JRE.
- CSMHOME
  Use this variable to specify the path for the configuration file.
  If the Compute Systems Manager CLI is going to be used by multiple users on the same client, you must specify a different directory for CSMHOME for each user.
  If CSMHOME is not specified, the configuration file is saved under the directory specified for the HOME environment variable or USERPROFILE. The environment variable set by Linux is HOME, and the environment

variable set by Windows is USERPROFILE. You do not need to set HOME or USERPROFILE.

When you run the Compute Systems Manager CLI, the configuration file is searched in the following order:

1. CSMHOME
2. HOME
3. USERPROFILE

The configuration file that is found first is loaded.

Setting up the Hitachi Compute Systems Manager CLI for Windows

This section describes how to install the Hitachi Compute Systems Manager CLI for systems running Windows.

Prerequisites

Please check the prerequisite JRE version for the CLI and the JRE installation status. For details about the JRE version, see the *Release Notes*.

Procedure

1. In the global task bar area of Hitachi Compute Systems Manager, select **Tools**, and then select **Download**.
2. Install JRE.
3. On the **Compute Systems Manager Software Deployment** page, click **Download** from the Windows column in the CLI row.
4. Select **Save** and choose a temporary download directory in which to save the `CSMCli_win.exe` file.
5. Double click the `CSMCli_win.exe` icon.
6. In the Hitachi Self-Extractor window, click **Expand** and select the directory in which to install the CLI application.
7. Set the environment variables:
   - For HCSM_CLI_JRE_PATH, specify the JRE installation directory. For example:

     `HCSM_CLI_JRE_PATH=C:\Program Files\Java\jre6`
   - For CSMHOME, specify the path for the configuration file. For example:

     `CSMHOME=directory-where-the-file-was-expanded\home`

   > ⚠️ **Note:** You can set the environment variables by right-clicking **My Computer** and selecting **Properties > Advanced**. Click **Environment Variables** to create a new user variable.

8. From a command prompt, navigate to *directory-where-the-file-was-expanded*.

9. Run the CLI `configure` command.

10. Run the CLI `login` command to log into the CLI.

Setting up the Hitachi Compute Systems Manager CLI for Linux

This section describes how to install the Hitachi Compute Systems Manager CLI for systems running Linux.

Prerequisites

Please check the prerequisite JRE version for the CLI and the JRE installation status. For details about the JRE version, see the *Release Notes*.

Procedure

1. In the global task bar area of Hitachi Compute Systems Manager, select **Tools**, and then select **Download**

2. Install JRE.

3. On the **Compute Systems Manager Software Deployment** page, click **Download** from the Linux column in the CLI row.

4. Select **Save** and choose a temporary download directory in which to save the `CSMCli_lin.tar` file.

5. Expand the `CSMCli_lin.tar` file.

   For example, to expand the file in the `/opt/hcsmcli` directory:

   ```
   # mkdir /opt/hcsmcli
   # cd /opt/hcsmcli
   # tar xvf directory-where-the-file-was-downloaded/
   CSMCli_lin.tar
   ```

6. Set the environment variables:

   - For HCSM_CLI_JRE_PATH, specify the JRE installation directory. For example:

     `HCSM_CLI_JRE_PATH=/opt/Java/jre6`

   - For CSMHOME specify the path for the configuration file. For example:

     `CSMHOME=directory-where-the-file-was-expanded/home`

7. Run the CLI `configure` command.

8. Run the CLI `login` command to log into the CLI.

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Using the CLI

The following sections describe the CLI commands. Each command is described in detail, with syntax, options, examples, and returned values.

- □ List of CLI commands

- □ CLI command options and parameters

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List of CLI commands

The Hitachi Compute Systems Manager CLI includes the commands listed in the following table.

⚠️ **Note:** All commands must be preceded by the string `csm`. For example:

`csm login`

Command (short form)	Description
Commands for configuring and using the CLI	
configure on page 23	Use this command to configure the CLI so that a management client on which the CLI is installed can connect to the management server.
login on page 24	Use this command to log in to the management server.
logout on page 25	Use this command to log out from the management server.
ping on page 25	Use this command to determine whether the management server is reachable.
help on page 26	Use this command to display help information for a specific command or all commands.
Commands for getting information about the Compute Systems Manager managed resources	
GetAlerts (getalerts) on page 28	Use this command to specify conditions for obtaining all alert information.
GetHost (gethost) on page 30	Use this command to obtain summary details for all managed hosts or a specific host.
GetHostAlert (gethostalert) on page 32	Use this command to obtain alert details for all managed hosts or a specific host.
GetHostCPU (getcpu) on page 34	Use this command to obtain CPU details for all managed hosts or a specific host.
GetHostFCNetwork (getfc) on page 36	Use this command to obtain Fibre Channel (FC) details for all managed hosts or a specific host.
GetHostFileSystem (getfilesystem) on page 37	Use this command to obtain file system details for all managed hosts or a specific host.
GetHostIPNetwork (getip) on page 39	Use this command to obtain LAN details for all managed hosts or a specific host.
GetHostMemory (getmemory) on page 41	Use this command to obtain memory details for all managed hosts or a specific host.
GetHostOs (getos) on page 43	Use this command to display whether SMT can be used for all managed hosts or a specific host. If the information cannot be acquired, the value is left blank.
GetHostPCI (getpci) on page 45	Use this command to obtain PCI details for all managed hosts or a specific host.
GetHostRemoteManagement (getrmtmgmt) on page 46	Use this command to obtain remote management device information for all managed hosts or a specific host.

Command (short form)	Description
GetTaskInfo (gettaskinfo) on page 48	Use this command to obtain task status and ID of all registered tasks.
Commands for controlling the power of managed hosts	
PowerOFF (poweroff) on page 50	Use this command to register the task with the management server and then power down a specific host or group of hosts without shutting down the operating system.
PowerON (poweron) on page 51	Use this command to register the task with the management server and then power up a specific host or multiple managed hosts.
RebootOS (rebootos) on page 52	Use this command to register the task with the management server and then reboot a specific host or multiple managed hosts.
ShutdownOS (shutdownos) on page 53	Use this command to register the task with the management server and then shut down a specific host or multiple managed hosts.
Commands for using Deployment Manager#	
DpmBackup (dpmbackup) on page 54	Use this command to back up the system disk or partition for the specified managed resources (servers, LPARs, and virtual machines).
DpmRestore (dpmrestore) on page 58	Use this command to restore the system disk or partition for the specified managed resources (servers, LPARs, and virtual machines).
DpmDeleteImageFile (dpmdeleteimagefile) on page 61	Use this command to delete the specified image file (backup file and snapshot file) from the management server.
DpmSnapshot (dpmsnapshot) on page 63	Use this command to take a snapshot from the source managed resource and save it on the management server.
DpmCreateTemplate (dpmcreatetemplate) on page 66	Use this command to customize the host names and network settings of existing templates (base template) to create a new template.
DpmDeploy (dpmdeploy) on page 77	Use this command to set the deployment template in the snapshot file to create the master image, and then deploy it to the specified managed resources (servers, LPARs, and virtual machines).

#: You must have a plug-in license to execute the commands. You can register and manage plug-in licenses by using the GUI. For details on these procedures, see the *Hitachi Command Suite Compute Systems Manager User Guide*.

CLI command options and parameters

This section explains the format and syntax of the CLI commands.

The general format for the command line is as follows:

csm *command-name* [*options*]... [*parameters*]...

The CLI supports the following four types of arguments:

- *command-name*
  The name of a command, such as `GetHost` or `GetHostOs`.
- *options*
  Use the format described in the Syntax section for each command.
- *parameters*
  Parameters contain information sent to the server as part of a request. The required parameters required are specific to each command. Each parameter consists of a name and a value.

  Specify parameters in the format *name=value*. The following is an example:

  ```
  hostname=HOST1
  ```

  Specify parameters as single character strings.

  Enclose parameters that contain spaces in double quotation marks, as follows:

  ```
  GetTaskInfo name="Reboot OS-3"
  ```

  Parameters can be specified in any order. *value* is case sensitive unless otherwise noted.

CLI command return responses

The CLI responds with a **return value** after it finishes running a command process.

There are two types of CLI return values: 0 and 1. A return value of 0 indicates the command completed successfully, and a return value of 1 indicates an error.

When the CLI terminates normally, the processing results of the command are sent to the standard output. Checking the results of a CLI command task by simply examining the return values of the CLI commands is usually not enough. To obtain specific information about a task, use the `GetTaskInfo` command.

Redirecting the command output into a file

By default, the Hitachi Compute Systems Manager CLI displays the output of a command in your command window. However, you can redirect the output of any command to a file using the (>) redirect character.

For example:

```
client1> csm gethost hostname=HostSystem1 > filename
```

If you specify the file name only, the system creates the file in the local directory. If you want to save the file in a different location, you can also specify a path name.

For example:

```
client1> csm gethost hostname=HostSystem1 > c:\user\fred
\hostinfo.txt
```

User roles for running commands

The following roles can be assigned to a user group to which the user belongs:

- Admin: Users with this role can complete tasks such as use resources, view resource information, and view system settings. Also, if All Resources is assigned, the user can register the resources to manage and change the system settings.
- Modify: Users with this role can manage resources and view information about managed resources.
- View: User with this role can view resource information.

Users who execute CLI commands need roles for the target resources.

Assign a resource group to which the command execution target resources belong, and a required role to the user group to which the user belongs.

The following table shows the roles required for each CLI command:

Command (Short Form)	Role		
	Admin	Modify	View
configure on page 23	Yes	Yes	Yes
login on page 24	Yes	Yes	Yes
logout on page 25	Yes	Yes	Yes
ping on page 25	Yes	Yes	Yes
help on page 26	Yes	Yes	Yes
GetAlerts (getalerts) on page 28	Yes	Yes	Yes
GetHost (gethost) on page 30	Yes	Yes	Yes
GetHostAlert (gethostalert) on page 32	Yes	Yes	Yes
GetHostCPU (getcpu) on page 34	Yes	Yes	Yes
GetHostFCNetwork (getfc) on page 36	Yes	Yes	Yes
GetHostFileSystem (getfilesystem) on page 37	Yes	Yes	Yes
GetHostIPNetwork (getip) on page 39	Yes	Yes	Yes
GetHostMemory (getmemory) on page 41	Yes	Yes	Yes
GetHostOs (getos) on page 43	Yes	Yes	Yes
GetHostPCI (getpci) on page 45	Yes	Yes	Yes
GetHostRemoteManagement (getrmtmgmt) on page 46	Yes	Yes	Yes
GetTaskInfo (gettaskinfo) on page 48	Yes	Yes	Yes

Command	Role		
(Short Form)	Admin	Modify	View
PowerOFF (poweroff) on page 50	Yes	Yes	No
PowerON (poweron) on page 51	Yes	Yes	No
RebootOS (rebootos) on page 52	Yes	Yes	No
ShutdownOS (shutdownos) on page 53	Yes	Yes	No
DpmBackup (dpmbackup) on page 54	Yes#	Yes#	No
DpmRestore (dpmrestore) on page 58	Yes#	Yes#	No
DpmDeleteImageFile (dpmdeleteimagefile) on page 61	Yes#	No	No
DpmSnapshot (dpmsnapshot) on page 63	Yes#	Yes#	No
DpmCreateTemplate (dpmcreatetemplate) on page 66	Yes#	No	No
DpmDeploy (dpmdeploy) on page 77	Yes#	Yes#	No

#: Users belonging to a user group to which All Resources is assigned can execute CLI commands.

configure

Use the `configure` command to configure the CLI so that a management client on which the CLI is installed can connect to the management server.

If the management server and the management client are on different machines, you will need to use the `configure` command to specify settings in order to use the CLI. If the management server and the management client are the same machine, and if SSL is not in use, you do not need to specify settings by using the `configure` command.

When you execute the `configure` command, you are asked to enter the following items. Press **Enter** to accept the default value.
- Host name or IP address of the management server
- Port number of the management server
- Whether to use SSL for communication with the management server

When you execute the `configure` command, a configuration file (`.csmrc`) is created in the directory specified by the CSMHOME environmental variable. If the configuration file already exists, you can update it. When you update the configuration file, comments in the file are retained.

The `configure` command also performs a simple access check on the specified management server. If the management server is not running, an error is reported, but you can instruct the command to ignore the errors.

Syntax

```
csm configure
```

Options

None

Examples

The following is a sample configuration interactively modified by the `configure` command.

```
client1> csm configure
KASV23804-I The .csmrc file in "C:\user\fred" (CSMHOME) has been
read.
HCSM server host name [localhost]:172.17.79.47
Use SSL (y/n) ? [n]:
HCSM server port number [22015]:
KASV23800-I The HCSM server is up and running.
Overwrite existing .csmrc file at "C:\user\fred\.csmrc" (y/n) ?
[n]:
```

Return values

Value	Meaning
0	Success
1	Error

login

Use the `login` command to log into a Hitachi Compute Systems Manager management server.

After connecting to the server, you can use the CLI to obtain information about managed hosts and perform power operations on any managed host.

If your login session remains idle for a certain number of minutes (set by the server administrator), your session times out and you are logged off the system.

Syntax

```
csm login [-user username] [-password password]
```

Options

The following options can be specified with the `login` command.

Option	Description
-user	Specify the name of the user logging in.
-password	Specify the password for the user logging in.

Examples

```
client1>csm login

HCSM[http://localhost:22015/ComputeSystemsManager] Login :admin
Password :
KASV23801-I Login successful.
```

Return values

Value	Meaning
0	Success
1	Error

logout

Use the `logout` command to log out of a Hitachi Compute Systems Manager management server.

Syntax

```
csm logout
```

Options

None

Examples

```
client1>csm logout
```

Return values

Value	Meaning
0	Success
1	Error

ping

Use the `ping` command to determine whether the management server is available for a connection.

The `ping` command accesses the management server and obtains version information from the server. The purpose of this command is to test that the environment is correctly set up and the server is running.

Syntax

```
csm ping
```

Options

None

Examples

The following command checks whether the management server is available for a network connection:

```
client1>csm ping

Pinging server at http://172.17.79.47:22015/
ComputeSystemsManager:
Response time : 1656msec
Timestamp at server : 2015/01/11 16:09:39
Product Version : 8.0.0
Supported protocol version range : from 1 to 1
Deprecated protocol version : equal or below 0
```

Return values

Value	Meaning
0	Success
1	Error

help

Use the `help` command to display help information for a specific command or all commands.

Syntax

```
csm help [command [command...]]
```

Options

The following option can be specified with the `help` command.

Option	Description
command	Displays help for the specified command to standard output.

Option	Description
	If no command is specified, the system displays a list of all commands.

Examples

Use the following command to obtain a list of all commands:

```
client1>csm help

Command shell to issue commands to the CSM server. usage : csm
[<subcommand> <args...>]

This will run one or more subcommands.

If you are connecting to a CSM server on the localhost, no
configuration is necessary.

To access a remote CSM server, specify the server host by
executing a "configure" command.

After specifying the host use "csm ping" to test communication
with the server. Then use "csm login" to establish a session.

Available subcommands (short forms are shown in parentheses):
    configure
    help
    ping
    login
    logout
    GetHost(gethost)
    GetHostAlert(gethostalert)
    GetHostCPU(getcpu)
    GetHostFCNetwork(getfc)
    GetHostFileSystem(getfilesystem)
    GetHostIPNetwork(getip)
    GetHostMemory(getmemory)
    GetHostRemoteManagement (getrmtmgmt)
    GetHostOs(getos)
    GetHostPCI(getpci)
    GetAlerts(getalerts)
    GetTaskInfo(gettaskinfo)
    RebootOS(rebootos)
    ShutdownOS(shutdownos)
    PowerON(poweron)
    PowerOFF(poweroff)
    DpmBackup(dpmbackup)
    DpmRestore(dpmrestore)
    DpmSnapshot(dpmsnapshot)
    DpmDeploy(dpmdeploy)
    DpmDeleteImageFile(dpmdeleteimagefile)
    DpmCreateTemplate(dpmcreatetemplate)
```

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Return values

Value	Meaning
0	Success
1	Error

GetAlerts (getalerts)

Use the `GetAlerts` command to obtain the following information from all managed hosts:

- In-progress alerts
- Resolved alerts
- Unconfirmed alerts
- Alerts generated after a specified date
- Maximum number of alerts to be displayed

Alert details are obtained for all managed hosts when the `GetAlerts` command is used without any filtering (status, datefilter and countfilter) options. To display a list of alerts with a specific status, use the `status` option.

> **Note:** You can use the alias `getalerts` in place of the `GetAlerts` command at any time.

Syntax

```
csm {GetAlerts | getalerts} [status={RESOLVED | INPROGRESS |
UNCONFIRMED}] [datefilter=YYYY/MM/DD] [countfilter=count] [-count
| -describe] [-format {csv | csv-no-header | xml}]
```

Options

The following options can be specified with the `GetAlerts` command.

Option	Description
-count	Displays the total number of alerts of managed hosts or a subset of those alerts specified by the other command options. The output is displayed in the format specified in the -format option. If you omit the -format option, only the number of alerts is displayed in one row. You cannot specify the -count option and the -describe option at the same time.
-describe	Displays information about each attribute for the GetAlerts command.

Option	Description
	The output is displayed in the format specified in the `-format` option.
	If you omit the `-format` option, the information about each attribute is displayed as text.
	You cannot specify the `-count` option and the `-describe` option at the same time.
`status`	Displays the alerts based on the status. The values for this option are: `RESOLVED`, `INPROGRESS` and `UNCONFIRMED`. Unconfirmed alerts are displayed by default.
datefilter	Displays the alerts from a specific date in the form *YYYY/MM/DD*.
countfilter	Filters the maximum number of alerts to be obtained. By default, all alerts will be obtained. The output of this option displays the latest alerts available in the database.
-format	This option displays the output style of `GetAlerts` to standard output in `xml`, `csv`, or `csv-no-header` format. If this option is not specified, the output is displayed as tabbed text.

Examples

Use the following command to get the two latest alerts for all managed hosts displayed as standard output on `client1`:

```
client1>csm GetAlerts countfilter=2

ReceivedAlertInfo Instance
  alertDescription: Error level SNMP trap has occurred in the
service of the host.
  alertLevel: Error
  hostName: DEMO-SYS-8-48
  alertId: 0x0300
  occurredTime: 2015-01-08 16:23:19
  modifiedTime:
  status: Unconfirmed
ReceivedAlertInfo Instance
  alertDescription: Error level SNMP trap has occurred in the
driver of the host.
  alertLevel: Error
  hostName: DEMO-SYS-8-48
  alertId: 0x0010
  occurredTime: 2015-01-08 16:20:06
  modifiedTime:
  status: Unconfirmed
```

You can also redirect the command output to a file:

```
client1>csm GetAlerts countfilter=2 > filename
```

Return values

Value	Error
0	Success
1	Error

Output

The following table shows the items that are output by the -format option.

Output		Description
Major item name	**Minor item name**	
ReceivedAlertInfo	alertDescription	Displays the alert contents.
	alertLevel	Displays the alert levels. [Error, Warning, Information]
	hostName	Displays the host name.
	alertId	Displays the alert ID.
	occurredTime	Displays the alert occurrence time.
	modifiedTime	Displays the modified time of alert status.
	status	Displays the alert status. [Unconfirmed, In Progress, Resolved]

GetHost (gethost)

Use the GetHost command to obtain summary details for all managed hosts or a specific host.

Note: You can use the alias gethost in place of the GetHost command at any time.

Syntax

```
csm {GetHost | gethost} [hostname=hostname] [-count | -describe]
[-format {csv | csv-no-header | xml}]
```

Options

The following options can be specified with the GetHost command.

Option	Description
hostname	The name of the host for which information is to be acquired. If you don't specify this option, the host summary details are obtained for all managed hosts.
-count	Displays the number of hosts or a subset of those hosts specified by the other command options. The output is displayed in the format specified in the -format option. If you omit the -format option, only the number of managed hosts is displayed in one row. You cannot specify the -count option and the -describe option at the same time.
-describe	Displays information about each attribute for the GetHost command. The output is displayed in the format specified in the -format option. If you omit the -format option, the information about each attribute is displayed as text. You cannot specify the -count option and the -describe option at the same time.
-format	Displays the CLI output in xml, comma-separated value (csv), or csv-no-header format. If this option is not specified, the output is displayed as tabbed text.

Examples

Use the following example to display summary host information for HostSystem1:

```
client1>csm gethost hostname=HostSystem1

Host Instance
  hostName: HostSystem1
  osName: Microsoft Windows Server 2008 R2 Enterprise
  manufacturer: Hitachi
  ipAddress: 172.17.79.48
  productName: ComputeBlade 520HB1
  hostStatus: Running
  serialNumber: EEDB1242-F9DE-59AA-E92D-CE2200213535
  lastRefreshed:2015-01-29 15:59:06
  error: 46
  warning: 38
  information: 28
```

You can also redirect the command output to a file:

```
client1>csm gethost hostname=HostSystem1 > filename
```

Return values

Value	Meaning
0	Success
1	Error

Output

The following table shows the items that are output by the -format option.

Output		Description
Major item name	**Minor item name**	
Host	hostName	Displays the host name.
	osName	Displays OS name.
	manufacturer	Displays the vendor.
	ipAddress	Displays IP address.
	productName	Displays the product name.
	hostStatus	Displays the host operation status. [Running, Stopped, Unknown]
	serialNumber	Displays the serial number.
	lastRefreshed	Displays the last refreshed date time.
	error	Displays the number of errors.
	warning	Displays the number of warning alerts.
	information	Displays the number of information alerts.

GetHostAlert (gethostalert)

Use the GetHostAlert command to obtain alert details for all managed hosts or a specific host.

> **Note:** You can use the alias gethostalert in place of the GetHostAlert command at any time.

Syntax

```
csm {GetHostAlert | gethostalert} [hostname=hostname] [-count | -describe] [-format {csv | csv-no-header | xml}]
```

Options

The following options can be specified with the GetHostAlert command.

Option	Description
hostname	The name of the host for which alert information is to be acquired. If this option is not specified, the alert details are obtained for all managed hosts.
-count	Displays the total number of alerts of managed hosts or a subset of those alerts specified by the other command options. The output is displayed in the format specified in the -format option. If you omit the -format option, only the number of alerts is displayed in one row. You cannot specify the -count option and the -describe option at the same time.
-describe	Displays information about each attribute for the GetHostAlert command. The output is displayed in the format specified in the -format option. If you omit the -format option, the information about each attribute is displayed as text. You cannot specify the -count option and the -describe option at the same time.
-format	Displays the CLI output in xml, comma-separated value (csv), or csv-no-header format. If this option is not specified, the output is displayed as tabbed text.

Examples

The following example shows how to use the gethostalert -count command to display the number of alerts for all hosts.

client1>**csm gethostalert -count**

You can also redirect the command output to a file:

client1>**csm gethostalert -count >** *filename*

Return values

Value	Meaning
0	Success
1	Error

Output

The following table shows the items that are output by the -format option.

Output		Description
Major item name	**Minor item name**	
ReceivedAlertInfo	hostName	Displays the host name.
	alertId	Displays the alert ID.
	alertLevel	Displays the alert levels. [Error, Warning, Information]
	failureLocationName	Displays the alert occurrence locations.
	occurredTime	Displays the alert occurrence time.
	alertDescription	Displays the alert contents.
	status	Displays the alert status. [Unconfirmed, In Progress, Resolved]

GetHostCPU (getcpu)

Use the `GetHostCPU` command to obtain CPU details for all managed hosts or a specific host.

> ⚠️ **Note:** You can use the alias `getcpu` in place of the `GetHostCPU` command at any time.

Syntax

```
csm {GetHostCPU | getcpu} [hostname=hostname] [-count | -
describe] [-format {csv | csv-no-header | xml}]
```

Options

The following options can be specified with the `GetHostCPU` command.

Option	Description
hostname	The name of the host for which file system details are to be acquired. If you do not specify this option, the CPU details are obtained for all managed hosts.
-count	Displays the total number of managed hosts or a subset of those hosts specified by the other command options. The output is displayed in the format specified in the -format. If you omit the -format option, only the number of managed hosts is displayed in one row.

Option	Description
	You cannot specify the -count option and the -describe option at the same time.
-describe	Displays information about each attribute for the GetHostCPU command. The output is displayed in the format specified in the -format option. If you omit the -format option, the information about each attribute is displayed as text. You cannot specify the -count option and the -describe option at the same time.
-format	Displays the CLI output in xml, comma-separated value (csv), or csv-no-header format. If this option is not specified, the output is displayed as tabbed text.

Examples

Use the following command to get CPU details for HostSystem2:

```
client1>csm GetHostCPU hostname=HostSystem2

Cpu Instance
  hostName: HostSystem2
  cpuName: Intel(R) Xeon(R) CPU E5-2650 v3 @ 2.30GHz
  frequencyInMhz: 2301.0
  numberOfCpus: 2
  numberOfCores: 10
  l2CacheSizeInKB: 2560.0
  l3CacheSizeInKB: 25600.0
```

You can also redirect the command output to a file:

```
client1>csm GetHostCPU hostname=HostSystem2 >filename
```

Return values

Value	Meaning
0	Success
1	Error

Output

The following table shows the items that are output by the -format option.

Output		Description
Major item name	**Minor item name**	
Cpu	hostName	Displays the host name.
	cpuName	Displays the CPU name.

Output		Description
Major item name	**Minor item name**	
	frequencyInMhz	Displays CPU frequency.
	numberOfCpus	Displays the number of CPUs.
	numberOfCores	Displays the number of cores.
	l2CacheSizeInKB	Displays the L2 Cache size.
	l3CacheSizeInKB	Displays the L3 Cache size.

GetHostFCNetwork (getfc)

Use the `GetHostFCNetwork` command to obtain Fibre Channel (FC) adapter details for all managed hosts or a specific host.

> **Note:** You can use the alias `getfc` in place of the `GetHostFCNetwork` command at any time.

Syntax

```
csm {GetHostFCNetwork | getfc} [hostname=hostname] [-count | -
describe] [-format {csv | csv-no-header | xml}]
```

Options

The following options can be specified with the `GetHostFCNetwork` command.

Option	Description
hostname	The name of the host for which FC adapter details are to be acquired. If you don't specify this option, the FC adapter details are obtained for all managed hosts.
-count	Displays the total number of available FC adapters or a subset of those FC adapters specified by the other command options. The output is displayed in the format specified in the -format option. If you omit the -format option, only the number of FC information items is displayed in one row. You cannot specify the -count option and the -describe option at the same time.
-describe	Displays information about each attribute for the GetHostFCNetwork command. The output is displayed in the format specified in the -format option. If you omit the -format option, the information about each attribute is displayed as text.

Option	Description
	You cannot specify the `-count` option and the `-describe` option at the same time.
`-format`	Displays the CLI output in `xml`, comma-separated value (`csv`), or `csv-no-header` format. If this option is not specified, the output is displayed as tabbed text.

Examples

Use the following command to get FC adapter details for HostSystem1:

```
client1>csm GetHostFCNetwork hostname=HostSystem1

FCNetwork Instance
hostName: HostSystem1
adapterName: Hitachi HFCE0802 FW:0030044D DRV:4.1.6.790
wwpn: 23:45:67:89:AB:CD:EF:00
wwnn: 23:45:67:89:AB:CD:EF:01
```

You can also redirect the command output to a file:

```
client1>csm GetHostFCNetwork hostname=HostSystem1 > filename
```

Return values

Value	Meaning
0	Success
1	Error

Output

The following table shows the items that are output by the `-format` option.

Output		Description
Major item name	**Minor item name**	
FCNetwork	hostName	Displays the host name.
	adapterName	Displays the adapter name.
	wwpn	Displays the World Wide Port Name to be assigned.
	wwnn	Displays the World Wide Node Name to be assigned.

GetHostFileSystem (getfilesystem)

Use the `GetHostFileSystem` command to obtain file system details for all managed hosts or a specific host.

> **Note:** You can use the alias `getfilesystem` in place of the `GetHostFileSystem` command at any time.

Syntax

```
csm {GetHostFileSystem | getfilesystem} [hostname=hostname] [-count | -describe] [-format {csv | csv-no-header | xml}]
```

Options

The following options can be specified with the `GetHostFileSystem` command.

Option	Description
`hostname`	The name of the host for which file system details are to be acquired.
	If you do not specify this option, the host file system details are obtained for all managed hosts.
`-count`	Displays the total number of file systems for managed hosts or a subset of those file systems specified by the other command options.
	The output is displayed in the format specified in the `-format` option.
	If you omit the `-format` option, only the number of file systems is displayed in one row.
	You cannot specify the `-count` option and the -describe option at the same time.
`-describe`	Displays information about each attribute for the `GetHostFileSystem` command.
	The output is displayed in the format specified in the `-format` option.
	If you omit the `-format` option, the information about each attribute is displayed as text.
	You cannot specify the `-count` option and the `-describe` option at the same time.
`-format`	Displays the CLI output in `xml`, comma-separated value (`csv`), or `csv-no-header` format. If this option is not specified, the output is displayed as tabbed text.

Examples

Use the following command to get file system details for HostSystem1:

```
client1>csm GetHostFileSystem hostname=HostSystem1

FileSystem Instance
  hostName: HostSystem1
  driveName: C:
  driveType: Local Disk
  fileSystemType: NTFS
  totalSizeInMB: 476937.5
```

```
        usedSizeInMB: 109374.1
        freeSizeInMB: 367563.3
```

You can also redirect the command output to a file:

```
client1>csm GetHostFileSystem hostname=HostSystem1 > filename
```

Return values

Value	Meaning
0	Success
1	Error

Output

The following table shows the items that are output by the -format option.

Output		Description
Major item name	**Minor item name**	
FileSystem	hostName	Displays the host name.
	driveName	Displays the drive name.
	driveType	Displays drive type.
	fileSystemType	Displays the format type.
	totalSizeInMB	Displays the total capacity.
	usedSizeInMB	Displays the used capacity.
	freeSizeInMB	Displays the unused capacity.

GetHostIPNetwork (getip)

Use the GetHostIPNetwork command to obtain LAN details for all managed hosts or a specific host.

⚠️ **Note:** You can use the alias getip in place of the GetHostIPNetwork command at any time.

Syntax

```
csm {GetHostIPNetwork | getip} [hostname=hostname] [-count | -
describe] [-format {csv | csv-no-header | xml}]
```

Options

The following options can be specified with the GetHostIPNetwork command.

Option	Description
hostname	The name of the host for which LAN details are acquired.
	If you do not specify this option, the LAN details are obtained for all managed hosts.
-count	Displays the total number of available LANs or a subset of those LANs specified by the other command options.
	The output is displayed in the format specified in the -format option.
	If you omit the -format option, only the number of LANs is displayed in one row.
	You cannot specify the -count option and the -describe option at the same time.
-describe	Displays information about each attribute for the GetHostIPNetwork command.
	The output is displayed in the format specified in the -format option.
	If you omit the -format option, the information about each attribute is displayed as text.
	You cannot specify the -count option and the -describe option at the same time.
-format	Displays the CLI output in xml, comma-separated value (csv), or csv-no-header format. If this option is not specified, the output is displayed as tabbed text.

Examples

Use the following command to get LAN details for HostSystem1:

```
client1>csm GetHostIPNetwork hostname=HostSystem1

IpAddress Instance
  hostName: HostSystem1
  adapterName: Intel(R) PRO/1000 MT Network Connection
  adapterType: port
  ipAddress: 172.17.79.48
  subnetMask: 255.255.255.0
  networkAddress: 172.17.79.0
  macAddress: 00:50:56:92:00:59
```

You can also redirect the command output to a file:

```
client1>csm GetHostIPNetwork hostname=HostSystem1 > filename
```

Return values

Value	Meaning
0	Success
1	Error

Output

The following table shows the items that are output by the –format option.

Output		Description
Major item name	**Minor item name**	
IpAddress	hostName	Displays the host name.
	adapterName	Displays the adapter name.
	adapterType	Displays adapter type.
	ipAddress	Displays the IP address.
	subnetMask	Displays the subnet mask.
	networkAddress	Displays the network address.
	macAddress	Displays the MAC address.

GetHostMemory (getmemory)

Use the GetHostMemory command to obtain memory details for all managed hosts or a specific host.

Note: You can use the alias getmemory in place of the GetHostMemory command at any time.

Syntax

```
csm {GetHostMemory | getmemory} [hostname=hostname] [-count | -
describe] [-format {csv | csv-no-header | xml}]
```

Options

The following options can be specified with the GetHostMemory command.

Option	Description
hostname	The name of the host for which memory details are acquired.
	If you do not specify this option, the memory details are obtained for all managed hosts.
–count	Displays the total number of managed hosts or a subset of those hosts specified by the other command options.
	The output is displayed in the format specified in the –format option.
	If you omit the –format option, only the number of managed hosts is displayed in one row.
	You cannot specify the –count option and the –describe option at the same time.

Option	Description
-describe	Displays information about each attribute for the GetHostMemory command.
	The output is displayed in the format specified in the -format option.
	If you omit the -format option, the information about each attribute is displayed as text.
	You cannot specify the -count option and the -describe option at the same time.
-format	Displays the CLI output in xml, comma-separated value (csv), or csv-no-header format. If this option is not specified, the output is displayed as tabbed text.

Examples

Use the following command to get memory details for HostSystem1:

```
client1>csm GetHostMemory hostname=HostSystem1

Memory Instance
  hostName: HostSystem1
  totalSizeInMB: 3.4
  maxPageFileSizeInMB: 1.9
```

You can also redirect the command output to a file:

```
client1>csm GetHostMemory hostname=HostSystem1 > filename
```

Return values

Value	Meaning
0	Success
1	Error

Output

The following table shows the items that are output by the -format option.

Output		Description
Major item name	**Minor item name**	
Memory	hostName	Displays the host name.
	totalSizeInMB	Displays the total capacity of memory.
	maxPageFileSizeInMB	Displays the paging file size.

GetHostOs (getos)

Use the `GetHostOs` command to display whether SMT can be used for all managed hosts or a specific host.

If the information cannot be acquired, the value is left blank.

⚠️ **Note:** You can use the alias `getos` in place of the `GetHostOs` command at any time.

Syntax

```
csm {GetHostOs | getos} [hostname=hostname] [-count | -describe]
[-format {csv | csv-no-header | xml}]
```

Options

The following options can be specified with the `GetHostOs` command.

Option	Description
`hostname`	The name of the host for which OS information is acquired. If you do not specify this option, the host OS details are obtained for all managed hosts.
`-count`	Displays the number of managed hosts or a subset of those hosts specified by the other command options. The output is displayed in the format specified in the `-format` option. If you omit the `-format` option, only the number of managed hosts is displayed in one row. You cannot specify the `-count` option and the `-describe` option at the same time.
`-describe`	Displays information about each attribute for the `GetHostOs` command. The output is displayed in the format specified in the `-format` option. If you omit the `-format` option, the information about each attribute is displayed as text. You cannot specify the `-count` option and the `-describe` option at the same time.
`-format`	Displays the CLI output in `xml`, comma-separated value (`csv`), or `csv-no-header` format. If this option is not specified, the output is displayed as tabbed text.

Examples

Use the following command to get host OS information for `HostSystem1`:

```
client1>csm GetHostOs hostname=HostSystem1

OS Instance
  hostName: HostSystem11
  uuid: 1E870542-5C8A-9DB3-670F-5D8F02A64F17
  osName: Microsoft Windows Server 2008 R2 Enterprise
  servicePackVersion: 0
  osVersion: 6.1.7600
  domainName: gse.hds.com
  description:
  lastReboot: 2015-01-03 19:36:17
  smt: Disable
```

You can also redirect the command output to a file:

```
client1>csm GetHostOs hostname=HostSystem1 > filename
```

Return values

Value	Meaning
0	Success
1	Error

Output

The following table shows the items that are output by the `-format` option.

Output		Description
Major item name	**Minor item name**	
OS	hostName	Displays the host name.
	uuid	Displays the universally unique identifier.
	osName	Displays the OS name.
	servicePackVersion	Displays the service pack version.
	osVersion	Displays the OS version.
	domainName	Displays the domain name.
	description	Displays the description of ths OS.
	lastReboot	Displays the latest boot date and time.
	smt	Displays whether SMT can be used. Enable: SMT can be used. Disable: SMT cannot be used. If the information cannot be acquired, the value is left blank.

GetHostPCI (getpci)

Use the `GetHostPCI` command to obtain PCI details for all managed hosts or a specific host.

> ⚠️ **Note:** You can use the alias `getpci` in place of the `GetHostPCI` command at any time.

Syntax

```
csm {GetHostPCI | getpci} [hostname=hostname] [-count | -describe] [-format {csv | csv-no-header | xml}]
```

Options

The following options can be specified with the `GetHostPCI` command.

Option	Description
`hostname`	The name of the host for which PCI details are acquired.
	If you do not use this option, the PCI slot details are obtained for all managed hosts.
`-count`	Displays the number of PCI devices or a subset of those PCI devices specified by the other command options.
	The output is displayed in the format specified in the `-format` option.
	If you omit the `-format` option, only the number of PCI devices is displayed in one row.
	You cannot specify the `-count` option and the `-describe` option at the same time.
`-describe`	Displays information about each attribute for the `GetHostPCI` command.
	The output is displayed in the format specified in the `-format` option.
	If you omit the `-format` option, the information about each attribute is displayed as text.
	You cannot specify the `-count` option and the `-describe` option at the same time.
`-format`	Displays the CLI output in `xml`, comma-separated value (`csv`), or `csv-no-header` format. If this option is not specified, the output is displayed as tabbed text.

Examples

Use the following command to get the number of PCI slots for all hosts:

```
client1>csm GetHostPCI -count
82
```

You can also redirect the command output to a file:

```
client1>csm GetHostPCI hostname=HostSystem1 > filename
```

Return values

Value	Meaning
0	Success
1	Error

Output

The following table shows the items that are output by the -format option.

Output		Description
Major item name	Minor item name	
PCI	hostName	Displays the host name.
	deviceID	Displays the device ID.
	deviceName	Displays the device name.
	Manufacturer	Displays the vendor.

GetHostRemoteManagement (getrmtmgmt)

Use the GetHostRemoteManagement command to obtain remote management device details for one or all managed hosts on which LOM is enabled.

> **Note:** You can use the alias getrmtmgmt in place of the GetHostRemoteManagement command at any time.

Syntax

```
csm {GetHostRemoteManagement | getrmtmgmt} [hostname=hostname] [-
count | -describe] [-format {csv | csv-no-header | xml}]
```

Options

The following options can be specified with the GetHostRemoteManagement command.

Option	Description
hostname	The name of the host for which remote management device details are acquired.
	If you do not specify this option, the remote management device details are obtained for all managed hosts.

Option	Description
-count	Displays the total number of managed hosts on which LOM is enabled, or a subset of those hosts specified by the other command options. The output is displayed in the format specified in the -format option. If you omit the -format option, only the number of managed hosts on which LOM is enabled is displayed in one row. You cannot specify the -count option and the -describe option at the same time.
-describe	Displays information about each attribute for the GetHostRemoteManagement command. The output is displayed in the format specified in the -format option. If you omit the -format option, the information about each attribute is displayed as text. You cannot specify the -count option and the -describe option at the same time.
-format	Displays the CLI output in xml, comma-separated value (csv), or csv-no-header format. If this option is not specified, the output is displayed as tabbed text.

Examples

Use the following command to get remote management device details for all managed hosts:

```
client1>csm GetHostRemoteManagement

LOMSetting Instance
  hostName: HostSystem2
  ipAddress: 192.168.0.102
  credentialName: IPMICredential-1
```

You can also redirect the command output to a file:

```
client1>csm GetHostRemoteManagement hostname=HostSystem1 >
filename
```

Return values

Value	Meaning
0	Success
1	Error

Output

The following table shows the items that are output by the -format option.

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Output		Description
Major item name	**Minor item name**	
LOMSetting	hostName	Displays the host name.
	ipAddress	Displays the IP address.
	credentialName	Displays the credential name.

GetTaskInfo (gettaskinfo)

Use the `GetTaskInfo` command to obtain:

- Information about all tasks registered by the GUI
- Information about all tasks registered with the CLI
- Information about a specific task based on name or ID
- Information about tasks based on the specified status

When you use the `GetTaskInfo` command without specifying the name, status, or type parameters, information about all tasks that have the `In Progress` status and that were registered by using the CLI are displayed.

For more information about tasks, see the *Hitachi Command Suite Compute Systems Manager User Guide*.

Note: You can use the alias `gettaskinfo` in place of the `GetTaskInfo` command at any time.

Syntax

```
csm {GetTaskInfo | gettaskinfo} [id=task-id | name=task-name |
status={In Progress | InProgress | Waiting | Cancelled |
Completed | Failed | All}] [type={cli | gui}] [-count | -
describe] [-format {csv | csv-no-header | xml}]
```

Options

The following options can be specified with the `GetTaskInfo` command.

Option	Description
id	Displays the current status of the task specified by the value `task-id`, which is the numeric ID of the registered task. This option cannot be specified with the `name` and `status` options.
name	Displays the current status of the task specified by the value `task-name`. This option cannot be specified with the `id` and `status` options.

Option	Description

status	Displays task information for each of the following case-sensitive status values:
	
	`Waiting`
	`In Progress (or InProgress)`
	`Failed`
	`Completed`
	`Cancelled`
	`All`
	
	The default status value is `In Progress`.

type	Specifies the management client type (`cli` or `gui`) that was registered with the task. The default value is `cli`.
-count	Displays the total number of tasks or a subset of those tasks specified by the other command options. The output is displayed in the format specified in the `-format` option. If you omit the `-format` option, only the number of tasks is displayed in one row. You cannot specify the `-count` option and the `-describe` option at the same time.
-describe	Displays information about each attribute for the `GetTaskInfo` command The output is displayed in the format specified in the `-format` option. If you omit the `-format` option, the information about each attribute is displayed as text. You cannot specify the `-count` option and the `-describe` option at the same time.
-format	Displays the CLI output in `xml`, comma-separated values (`csv`), or `csv-no-header` format. If this option is not specified, the output is displayed as tabbed text.

Examples

Use the following command to get information about the task named "Reboot OS-3":

```
client1>csm GetTaskInfo name="Reboot OS-3"

TaskExecutionInfo Instance
  taskID: 400000000001538
  taskName: Power On-1
  status: Waiting
```

Return values

Value	Meaning
0	Success
1	Error

Output

The following table shows the items that are output by the `-format` option.

Output		Description
Major item name	**Minor item name**	
TaskExecutionInfo	taskID	Displays the task ID.
	taskName	Displays the task name.
	status	Displays the task status.

PowerOFF (poweroff)

Use the `PowerOFF` command to register the task with the management server and then power down a specific host or group of hosts without shutting down the operating system.

> ⚠️ **Note:** You can use the alias `poweroff` in place of the `PowerOFF` command at any time.

Syntax

```
csm {PowerOFF | poweroff} ipaddress=ip_address[,ip_address...]
[elapseTime=elapse-time] [notification={send | not_send |
send_only_failed}][schedule={Now | Later date="YYYY/MM/DD
HH:MM:SS"}]
```

Options

The following options can be specified with the `PowerOFF` command.

Option	Description
ipaddress	The IP address of the host to power down. To power down multiple hosts, specify a series of comma-separated IP addresses. At least one IP address must be specified.
elapseTime	Expected waiting time for a single host to power down. Specify a value from 0 to 9999 (minutes). If you specify 0, the command uses the elapsed time value specified in the Compute Systems Manager user interface.
notification	Setting for notification by email. The possible values are send, not_send, and send_only_failed. The default value is not_send.
schedule	Indicates when to power down the host or hosts. The possible values are Now or Later. The default value is Now.
date	The date or time to power down the host or hosts in *YYYY/MM/DD HH:MM:SS* format. This value must be enclosed in double-quotes. This

Option	Description
	parameter is mandatory when the parameter `schedule=Later date` is specified.

Examples

The following command powers down the host with IP address 172.168.34.21 on January 21, 2015, at 12:05:05:

```
client1>csm PowerOFF ipaddress=172.168.34.21 schedule=Later
date="2015/01/21 12:05:05"
400000000001500
```

Return values

Value	Meaning
0	Success
1	Error

PowerON (poweron)

Use the `PowerON` command to register the task with the management server and then power up a specific host or multiple managed hosts.

> ⚠️ **Note:** You can use the alias `poweron` in place of the `PowerON` command at any time.

Syntax

```
csm {PowerON | poweron} ipaddress=ip_address[,ip_address...]
[elapseTime=elapse-time][notification={send | not_send |
send_only_failed}][schedule={Now | Later date="YYYY/MM/DD
HH:MM:SS"}]
```

Options

The following options may be specified with the `PowerON` command.

Option	Description
ipaddress	The IP address of the host to power on. A series of comma-separated IP addresses may be specified to power up more than one host. At least one IP address must be specified.
elapseTime	Expected waiting time for a single host to power on. Specify a value from 0 to 9999 (minutes). If you specify 0, the command uses the elapsed time value specified in the Compute Systems Manager user interface.

Option	Description
notification	Setting for notification by email. The possible values are send, not_send, and send_only_failed. The default value is not_send.
schedule	Indicates when to power on the host or hosts. The possible values are Now or Later. The default value is Now.
date	The date or time to power on the host or hosts in *YYYY/MM/DD HH:MM:SS* format. This value must be enclosed in double-quotes. This parameter is mandatory when the parameter schedule=Later date is specified.

Examples

The following command powers on the host with IP address 172.168.34.21 on January 21, 2015, at 12:05:05:

```
client1>csm PowerON ipaddress=172.168.34.21 schedule=Later
date="2015/01/21 12:05:05"
400000000002000
```

Return values

Value	Meaning
0	Success
1	Error

RebootOS (rebootos)

Use the RebootOS command to register the task with the management server and then reboot a specific host or multiple managed hosts.

> **Note:** You can use the alias rebootos in place of the RebootOS command at any time.

Syntax

```
csm {RebootOS | rebootos} ipaddress=ip_address[,ip_address...]
[elapseTime=elapse-time][notification={send | not_send |
send_only_failed}][schedule={Now | Later date="YYYY/MM/DD
HH:MM:SS"}]
```

Options

The following options must be specified with the RebootOS command.

Option	Description
ipaddress	The IP address of the host to restart. A series of comma-separated IP addresses may be specified to reboot more than one host. At least one IP address must be specified.
elapseTime	Expected waiting time for a single host to restart. Specify a value from 0 to 9999 (minutes). If you specify 0, the command uses the elapsed time value specified in the Compute Systems Manager user interface.
notification	Setting for notification by email. The possible values are send, not_send, and send_only_failed. The default value is not_send.
schedule	Indicates when to restart the host or hosts. The possible values are Now or Later. The default value is Now.
date	The date or time when to restart the host or hosts in YYYY/MM/DD HH:MM:SS format. This value must be enclosed in double-quotes. This parameter is mandatory when the parameter schedule=Later date is specified.

Examples

The following command reboots the host with IP address 172.168.34.21 on January 21, 2015, at 12:05:05:

```
client1>csm RebootOS ipaddress=172.168.34.21 schedule=Later
date="2015/01/21 12:05:05"
400000000002500
```

Return Codes

Value	Meaning
0	Success
1	Error

ShutdownOS (shutdownos)

Use the ShutdownOS command to register the task with the management server and then shut down a specific host or multiple managed hosts.

⚠️ **Note:** You can use the alias shutdownos in place of the ShutdownOS command at any time.

Syntax

```
csm {ShutdownOS | shutdownos}
ipaddress=ip_address[,ip_address...] [elapseTime=elapse-time]
[notification={send | not_send | send_only_failed}][schedule={Now
| Later date="YYYY/MM/DD HH:MM:SS"}]
```

Options

The following options may be specified with the ShutdownOS command.

Option	Description
ipaddress	The IP address of the host to shut down. A series of comma-separated IP addresses may be specified to shut down more than one host.
	At least one IP address must be specified.
elapseTime	Expected waiting time for a single host to shutdown. Specify a value from 0 to 9999 (minutes). If you specify 0, the command uses the elapsed time value specified in the Compute Systems Manager user interface.
notification	Setting for notification by email. The possible values are send, not_send, and send_only_failed. The default value is not_send.
schedule	Indicates when the host or hosts are to be shut down. The possible values are Now or Later date. The default value is Now.
date	The date or time when to shut down the host or hosts in YYYY/MM/DD HH:MM:SS format. This value must be enclosed in double-quotes. This parameter is mandatory when the parameter schedule=Later date is specified.

Examples

The following command shuts down the host with IP address 172.168.34.21 on January 21, 2015, at 12:05:05:

```
client1>csm ShutdownOS ipaddress=172.168.34.21 schedule=Later
date="2015/01/21 12:05:05"
400000000003000
```

Return values

Value	Meaning
0	Success
1	Error

DpmBackup (dpmbackup)

Use the DpmBackup command to back up the system disk or partition for the specified managed resources (servers, LPARs, and virtual machines).

> **Note:** You can use the alias dpmbackup in place of the DpmBackup command at any time.

Syntax

```
csm {DpmBackup | dpmbackup} macAddr=mac_addresss
diskNo=disk_number [partitionNo=partition_number]
[backupEntireDisk={enable | disable}]
```

```
backupFileName=backup_file_name [compressBackupData={enable |
disable}][allowForcePowerOff={yes | no}]
[powerStatusAfterTask={on | off | same}][schedule={Now | Later
date="YYYY/MM/DD HH:MM:SS"}][notification={send | not_send |
send_only_failed}]
```

Options

The following options may be specified with the DpmBackup command.

Option	Description
macAddr	Specify the MAC address of the resource to back up in hexadecimal notation. Separate octets with a colon (:).
	You must specify the MAC address that was detected when you added the managed resource on the management server.
diskNo	Specify the number of the disk to back up. Use an integer from 1 to 1,000.
partitionNo	If you want to back up specific partitions in the disk you have specified with diskNo, use this option to specify the partition numbers. Use an integer from 1 to 1,000.
	If you omit this option, all partitions in the disk specified with diskNo are backed up.
backupEntireDisk	Specify whether all sectors on the disk are to be backed up for the disk specified with diskNo.
	enable: All sectors, including unused sectors, are backed up.
	disable: only valid sectors are backed up.
	If you omit this option, the command is executed as though disable has been selected.
	Additionally, if you specify partitionNo to back up by partition, this option is ignored.
	Note: This is equivalent to the Back up entire disk check box in the Edit Backup Profile window in the GUI.
	For details on specifying sectors, see the Release Notes.
backupFileName	Specify the name of the backup file to save on the management server.
	Specify the absolute path including the .lbr extension, with up to 128 characters. Use only 1-byte characters.
	The following characters cannot be used (excluding colons (:) for drive letters).
	/ * ? < > " | : ;
compressBackupData	Specify whether the backup file is to be compressed.
	enable: Compress
	disable: Do not compress

Option	Description
	If you omit this option, the command is executed as though `enable` has been selected.
`allowForcePowerOff`	Specify whether to enable the management server to forcefully turn the power off, if the applicable resource is powered on. `yes`: Enable (forcefully turn the power off) `no`: Do not enable (do not forcefully turn the power off) If you omit this option, the command is executed as though `no` has been selected. Note: This option is equivalent to the Turn the selected resource OFF manually before executing the task check box in the GUI.
`powerStatusAfterTask`	Specify the power status of the resource to back up when the task is finished. `on`: Power on `off`: Power off `same`: Same as before executing the backup If you omit this option, the command is executed as though `same` has been selected.
`schedule`	Specify the time to start backing up. • `Now`: Immediately • `Later`: Start backing up at the time specified in the `date` option. If you specify `Later`, you also must specify the `date` option. If this option is omitted, the command is executed as though `Now` has been selected.
`date`	The date or time when to start backing up in *YYYY/MM/DD HH:MM:SS* format. This value must be enclosed in double-quotes. This parameter is mandatory when the parameter `schedule=Later` is specified.
`notification`	Setting for notification by email. The possible values are `send`, `not_send`, and `send_only_failed`. The default value is `not_send`.

Prerequisites

Confirm the following in advance:

• The MAC address of the managed resource to be manipulated
Check the MAC address detected when you added the managed resource to Deployment Manager.

• The disk configuration of the managed resource to be manipulated
The disk number and the partition number displayed in the operating system might differ from those numbers recognized by Deployment

Manager. We recommend that you check the numbers recognized by Deployment Manager in advance.

From the GUI, check the MAC address in the list of deployment resources, and check the disk configuration in the disk configuration information for the managed resource to be manipulated.

Do the following in advance:
- Add the managed resource to be manipulated to Deployment Manager

- Add a host (OS) on the managed resource to be manipulated to the management target
  For details on the procedure for adding the managed resource to Deployment Manager and the procedure for ensuring that the host is a management target, see the *Hitachi Command Suite Compute Systems Manager User Guide*.

Examples

The following example shows how to register a task to back up the managed resource whose MAC address is 00:00:87:1A:2B:3C, by specifying the file name `E:\csm-cli\BK-2014-12-25.lbr`:

```
client1>csm DpmBackup macAddr=00:00:87:1A:2B:3C diskNo=1
partitionNo=2 backupFileName=E:\csm-cli\BK-2014-12-25.lbr
powerStatusAfterTask=on schedule=Later date="2014/12/25
00:00:00" notification=send_only_failed
```

```
400000000003500
```

This example registers a task to back up data by using the following settings:
- MAC address of the managed resource to be backed up
  `00:00:87:1A:2B:3C`

- Disk to be backed up
  Partition 2 of disk 1

- Name of the backup image file to be saved
  `E:\csm-cli\BK-2014-12-25.lbr`

- Whether to compress the backup image file
  Compress (This is the default value that is used when this option is omitted.)

- Forced power-off
  Do not permit (This is the default value that is used when this option is omitted.)

- Power management after backup is complete
  Power on

- Date and time when backup is to be performed
  Backup starts at 0:00 a.m. on December 25, 2014.

- Email notification
  A notification is sent only if the task fails.

Return values

Value	Meaning
0	Scheduled the System-level Backup task
1	Failed to schedule the System-level Backup task

Notes:

- The `DpmBackup` command replaces the content of the backup profile of the specified managed resource with the content specified by the command. After the command is executed, the content specified by the command is reflected in the GUI.

- If a file of the same name exists in the path specified by the `backupFileName` parameter, the file will be overwritten. Change the file name if you want to retain multiple backup image files.

- If you use the GUI to register a task for backup, you can add additional characters such as a suffix according to the specified option. However, if you use the CLI to register a task for backup, the file name specified by using the CLI command will be used for the backup image file name.

DpmRestore (dpmrestore)

Use the `DpmRestore` command to restore the system disk or partition for the specified managed resources (servers, LPARs, and virtual machines).

Note: You can use the alias `dpmrestore` in place of the `DpmRestore` command at any time.

Syntax

```
csm {DpmRestore | dpmrestore} macAddr=mac_addresss
backupFileName=backup_file_name diskNo=disk_number
[partitionNo=partition_number] [allowForcePowerOff={yes | no}]
[powerStatusAfterTask={on | off | same}][schedule={Now | Later
date="YYYY/MM/DD HH:MM:SS"}][notification={send | not_send |
send_only_failed}]
```

Options

The following options may be specified with the `DpmRestore` command.

Option	Description
macAddr	Specify the MAC address of the resource to restore in hexadecimal notation. Separate octets with a colon (:). You must specify the MAC address that was detected when you added the managed resource on the management server.
backupFileName	Specify the name of the backup file to save on the management server. Specify the absolute path including the .lbr extension, with up to 128 characters. Use only 1-byte characters. The following characters cannot be used (excluding colons (:) for drive letters). / * ? < > " | : ;
diskNo	Specify the number of the disk to restore. Use an integer from 1 to 1,000.
partitionNo	If you want to restore specific partitions in the disk you have specified with `diskNo`, use this option to specify the partition numbers. Use an integer from 1 to 1,000. If you omit this option, all partitions in the disk specified with `diskNo` are restored.
allowForcePowerOff	Specify whether to enable the management server to forcefully turn the power off, if the applicable resource is powered on. `yes`: Enable (forcefully turn the power off) `no`: Do not enable (do not forcefully turn the power off) If you omit this option, the command is executed as though `no` has been selected. Note: This option is equivalent to the Turn the selected resource OFF manually before executing the task check box in the GUI.
powerStatusAfterTask	Specify the power status of the resource to restore when the task is finished. `on`: Power on `off`: Power off `same`: Same as before executing the backup If you omit this option, the command is executed as though `same` has been selected.
schedule	Specify the time to start restoring. • `Now`: Immediately • `Later`: Start restoring at the time specified in the `date` option. If you specify `Later`, you also must specify the `date` option.

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Option	Description
	If this option is omitted, the command is executed as though `Now` has been selected.
`date`	The date or time when to start the restoration `YYYY/MM/DD HH:MM:SS` format. This value must be enclosed in double-quotes. This parameter is mandatory when the parameter `schedule=Later` is specified.
`notification`	Setting for notification by email. The possible values are `send`, `not_send`, and `send_only_failed`. The default value is `not_send`.

Prerequisites

Confirm the following in advance:
- The MAC address of the managed resource to be manipulated
  Check the MAC address detected when you added the managed resource to Deployment Manager.

- The disk configuration of the managed resource to be manipulated
  The disk number and the partition number displayed on the operating system might differ from those numbers recognized by Deployment Manager. We recommend that you check the numbers recognized by Deployment Manager in advance.

From the GUI, check the MAC address in the list of deployment resources, and check the disk configuration in the disk configuration information for the managed resource to be manipulated.

Before you begin, add the managed resource to be manipulated to Deployment Manager.

For details on the procedure for adding the managed resource to Deployment Manager and the procedure for ensuring that the host is a management target, see the *Hitachi Command Suite Compute Systems Manager User Guide*.

Examples

The example below shows how to register a task to immediately restore the image file backed up by following the example for the `DpmBackup` command:

```
client1>csm DpmRestore macAddr=00:00:87:1A:2B:3C
backupFileName=E:\csmcli\BK-2014-12-25.lbr
allowForcePowerOff=yes schedule=Now notification=send
```

```
400000000004000
```

This example registers a task to restore data by using the following settings:
- MAC address of the managed resource to be restored
  `00:00:87:1A:2B:3C`

- Name of the backup image file to be used for restoration
  `E:\csm-cli\BK-2014-12-25.lbr`

- Disk to be restored
  Partition 2 of disk 1 (The setting that was specified during backup is inherited, because this option was omitted)

- Forced power-off
  Permit

- Power management after restoration is complete
  The power is set to the same state as before restoration was performed.

- Date and time when the restoration is to be performed
  Restoration starts immediately.

- Email notification
  A notification is always sent regardless of the execution result of the task.

Return values

Value	Meaning
0	Scheduled the System-level restoration task
1	Failed to schedule the System-level restoration task

⚠️ **Notes:**
- The `DpmRestore` command replaces the content of the restore profile of the specified managed resource with the content specified by the command. After the command is executed, the content specified by the command will be reflected in the GUI.

- Only the backup image file managed by Deployment Manager can be used for restoration. Image files on the file system of the management server cannot be used if these files are not managed by Deployment Manager. To use backup image files that are saved in other management servers, use the GUI to import these backup image files to Deployment Manager. For details on how to import image files, see the *Hitachi Command Suite Compute Systems Manager User Guide*.

DpmDeleteImageFile (dpmdeleteimagefile)

Use the `DpmDeleteImageFile` command to delete the specified image file (backup file and snapshot file) from the management server.

Note: You can use the alias `dpmdeleteimagefile` in place of the `DpmDeleteImageFile` command at any time.

Syntax

```
csm {DpmDeleteImageFile | dpmdeleteimagefile}
fileName=image_file_name
```

Options

The following options may be specified with the `DpmDeleteImageFile` command.

Option	Description
`fileName`	Specify the name of the image file to be deleted on the management server. Specify the absolute path including the .lbr extension, with up to 128 characters. Use only 1-byte characters.
	The following characters cannot be used (excluding colons (:) for drive letters).
	/ * ? < > " | : ;

Prerequisites

Confirm the name of the image file to be deleted in advance.

Examples

The following example shows how to delete the backup image file `E:\csm-cli\BK-2014-12-25.lbr`:

```
client1>csm DpmDeleteImageFile fileName=E:\csm-cli
\BK-2014-12-25.lbr

Done.
```

Return values

Value	Meaning
0	Succeeded in deleting the file
1	Failed to delete the file

Caution: Only the image file managed by Deployment Manager can be deleted by the `DpmDeleteImageFile` command. Image files on the file system of the management server cannot be deleted if these files are not managed by Deployment Manager.

DpmSnapshot (dpmsnapshot)

Use the `DpmSnapshot` command to take a snapshot from the source managed resource and save it on the management server.

> ⚠️ **Note:** You can use the alias `dpmsnapshot` in place of the `DpmSnapshot` command at any time.

Syntax

```
csm {DpmSnapshot | dpmsnapshot} macAddr=mac_addresss
diskNo=disk_number [partitionNo=partition_number]
[snapshotEntireDisk={enable | disable}]
snapshotfileName=snapshot_file_name [compressSnapshotData={enable
| disable}][allowForcePowerOff={yes | no}]
[powerStatusAfterTask={on | off | same}][schedule={Now | Later
date="YYYY/MM/DD HH:MM:SS"}][notification={send | not_send |
send_only_failed}]
```

Options

The following options may be specified with the `DpmSnapshot` command.

Option	Description
`macAddr`	Specify the MAC address of the resource to take a snapshot of in hexadecimal notation. Use the following format: `XX:XX:XX:XX:XX:XX` where `X` is a hexadecimal digit. You must specify the MAC address that was detected when you added the managed resource on the management server.
`diskNo`	Specify the number of the disk to take a snapshot of. Use an integer from 1 to 1,000.
`partitionNo`	If you want to take a snapshot of the specific partitions in the disk you have specified with `diskNo`, use this option to specify the partition numbers. Use an integer from 1 to 1,000. If you omit this option, the snapshot of all partitions in the disk specified with `diskNo` is obtained.
`snapshotEntireDisk`	Specify whether the snapshot of all sectors on the disk is to be obtained for the disk specified with `diskNo`. `enable`: All sectors, including unused sectors, are backed up. `disable`: only valid sectors are backed up. If you omit this option, the command is executed as though `disable` has been selected.

Option	Description
	Additionally, if you specify `partitionNo` to take a snapshot by partition, this option is ignored. Note: This is equivalent to the Back up entire disk check box in the Edit Snapshot Profile window in the GUI.
snapshotFileName	Specify the name of the snapshot file that is saved on the management server. Specify the absolute path including the .lbr extension, with up to 128 characters. Use only 1-byte characters. The following characters cannot be used (excluding colons (:) for drive letters). / * ? < > " | : ;
compressSnapshotData	Specify whether the snapshot file is to be compressed. `enable`: Compress `disable`: Do not compress If you omit this option, the command is executed as though `enable` has been selected.
allowForcePowerOff	Specify whether to enable the management server to forcefully turn the power off, if the applicable resource is powered on. `yes`: Enable (forcefully turn the power off) `no`: Do not enable (do not forcefully turn the power off) If you omit this option, the command is executed as though `no` has been selected. Note: This option is equivalent to the Turn the selected resource OFF manually before executing the task check box in the GUI.
powerStatusAfterTask	Specify the power status of the resource to take a snapshot of when the task is finished. `on`: Power on `off`: Power off `same`: Same as before obtaining the snapshot. If you omit this option, the command is executed as though `same` has been selected.
schedule	Specify the time to start taking the snapshot. The possible values are `Now` or `Later date`. The default value is `Now`. If this option is omitted, the command is executed as though `Now` has been selected.
date	The date or time when to start taking the snapshot when `Later` is specified in the `schedule` option. *YYYY/MM/DD HH:MM:SS* format. This value must be enclosed in double-quotes. This parameter is mandatory when the parameter `schedule=Later` is specified.

Option	Description
notification	Specify whether email notifications are to be sent when the task is finished. The possible values are send, not_send, and send_only_failed. The default value is not_send. If this option is omitted, the command is executed as though not_send has been selected.

Prerequisites

Confirm the following in advance:
- The MAC address of the managed resource to be manipulated
  Check the MAC address detected when you added the managed resource to Deployment Manager.

- The disk configuration of the managed resource to be manipulated
  The disk number and the partition number displayed in the operating system might differ from those numbers recognized by Deployment Manager. We recommend that you check the numbers recognized by Deployment Manager in advance.

From the GUI, check the MAC address in the list of deployment resources, and check the disk configuration in the disk configuration information for the managed resource to be manipulated.

Examples

The following example shows how to register a task to take a snapshot of the managed resource whose MAC address is 00:00:87:1A:2B:3C, by specifying the file name E:\csm-cli\SN-2014-12-25.lbr:

```
client1>csm DpmSnapshot macAddr=00:00:87:1A:2B:3C diskNo=1
snapshotEntireDisk=enable snapshotFileName=E:\csm-cli
\SN-2014-12-25.lbr powerStatusAfterTask=off schedule=Now
notification=send_only_failed
```

```
400000000004500
```

This example registers a task to take a snapshot by using the following settings:
- MAC address of the managed resource for which a snapshot is to be taken
  00:00:87:1A:2B:3C

- Disk where the snapshot is to be taken
  All sectors in disk1 (This is the default value that is used when this option is omitted.)

- Name of the snapshot image file to be saved
  E:\csm-cli\SN-2014-12-25.lbr

- Whether to compress the snapshot image file
  Compress (This is the default value that is used when this option is omitted.)

- Forced power-off
  Do not permit (This is the default value that is used when this option is omitted.)

- Power management after the snapshot is acquired
  Power off

- Date and time when the snapshot is to be acquired
  Taking the snapshot starts immediately.

- Email notification
  A notification is sent only if the task fails.

Return values

Value	Meaning
0	Succeeded in scheduling the Snapshot task
1	Failed to schedule the Snapshot task

Notes:

- The `DpmSnapshot` command replaces the content of the snapshot profile of the specified managed resource by the content specified by the command. After the command is executed, the content specified by the command will be reflected in the GUI.

- If a file of the same name exists in the path specified by the `snapshotFileName` parameter, the file will be overwritten. Change the file name if you want to retain multiple snapshot image files.

- If you use the GUI to register a task to take a snapshot, you can add additional characters such as a suffix according to the specified option. However, if you use the CLI to register a task to take a snapshot, the file name specified by using the CLI command will be used for the snapshot image file name.

DpmCreateTemplate (dpmcreatetemplate)

Use the `DpmCreateTemplate` command to customize the host names and network settings of existing templates (base template) to create a new template.

Note: You can use the alias `dpmcreatetemplate` in place of the `DpmCreateTemplate` command at any time.

Note: This command does not support the creation of brand new templates. A base template is required. Therefore, you must create the base template with the Compute Systems Manager graphical user interface (GUI) beforehand.

The settings of Windows and Linux templates that can be customized with this command are as follows:

Table 1 Customizable settings (Windows)

#	Category	Item	Possibility	Description
1	Basic information	Name	Yes	Specify with the `templateName` parameter.
2		Description	No	Do not set.
3	OS Parameter	Name of OS	No	Inherit from the base template.
4		Host name	Yes	Specify with the `hostName` parameter.
5		Domain account	No	Inherit from the base template.
6		Domain password	No	Inherit from the base template.
7		Work group	No	Inherit from the base template.
8		Product key	Yes	Specify with the `productKey` parameter.
9		Time zone	No	Inherit from the base template.
10		Language setting	No	Inherit from the base template.
11		User name	No	Inherit from the base template.
12		Company name	No	Inherit from the base template.
13		Admin password	No	Inherit from the base template.
14	Network Parameter	MAC address	Yes	Specify with the `macAddr` parameter.
15		IP address	Yes	Specify with the `ipAddr` parameter.
16		Subnet mask	Yes	Specify with the `subnet` parameter.
17		Default gateway	Yes	Specify with the `gateway` parameter.

#	Category	Item	Possibility	Description
18		Metric	Yes	Specify with the `metric` parameter.
19		DNS	Yes	Specify with the `dnsServer` parameter.
20		WINS	Yes	Specify with the `winsServer` parameter.

Table 2 Customizable settings (Linux)

#	Category	Item	Possibility	Description
1	Basic information	Name	Yes	Specify with the `templateName` parameter.
2		Description	No	Do not set.
3	OS Parameter	Primary DNS	Yes	Specify with the `primaryDnsServer` parameter.
4		Secondary DNS1	Yes	Specify with the `secondaryDnsServer1` parameter.
5		Secondary DNS2	Yes	Specify with the `secondaryDnsServer2` parameter.
6		Time zone	No	Inherit from the base template.
7	Network Parameter	MAC address	Yes	Specify with the `macAddr` parameter.
8		IP address	Yes	Specify with the `ipAddr` parameter.
9		Subnet mask	Yes	Specify with the `subnet` parameter.
10		Default gateway	Yes	Specify with the `gateway` parameter.
11		Device name	Yes	Specify with the `interfaceName` parameter.
12		Host name	Yes	Specify with the `hostName` parameter.

In the GUI, in the deployment template creation wizard for Linux, both OS Parameter and Network Parameter display the Host Name box. If you specify a host name in OS Parameter, the host name will automatically be inherited from the host name of the device whose name is specified as "eth0" in Network Parameter. In the CLI, the `hostName` parameter value specified as the host name of "eth0" will be set to the host name in OS Parameter.

Syntax (Windows)

```
csm {DpmCreateTemplate | dpmcreatetemplate} osType=Windows
templateName=new-template-name baseTemplateName=base-template-
name hostName=host-name productKey=windows-product-key
macAddr=mac-address-1[,mac-address-2, ... ,mac-address-4]
ipAddr=ip-address-1[,ip-address-2, ... ,ip-address-4]
subnet=subnet-mask-1[,subnet-mask-2, ... ,subnet-mask-4]
gateway=default-gateway-1[,default-gateway-2, ... ,default-
gateway-4] metric=gateway-metric-1,[gateway-
metric-2 ,... ,gateway-metric-4] dnsServer=dns-server-
address-1[,dns-server-address-2, ... ,dns-server-address-4]
winsServer=wins-server-address-1[,wins-server-
address-2, ... ,wins-server-address-4]
```

You can specify up to four of the following parameters, delimited by commas: `macAddr`, `ipAddr`, `subnet`, `gateway`, `metric`, `dnsServer`, and `winsServer`. The number of each of these parameters must be identical. Because parameters are combined in the specified order, make sure that there are no inconsistencies in the combinations.

Syntax (Linux)

```
csm {DpmCreateTemplate | dpmcreatetemplate} osType=Linux
primaryDnsServer=primary-dns-server-address
secondaryDnsServer1=secondary-dns-server1-address
secondaryDnsServer2=secondary-dns-server2-address
templateName=new-template-name baseTemplateName=base-template-
name macAddr=mac-address-1[,mac-address-2, ... ,mac-address-7]
ipAddr=ip-address-1[,ip-address-2, ... ,ip-address-7]
subnet=subnet-mask-1[,subnet-mask-2, ... ,subnet-mask-7]
gateway=default-gateway-1[,default-gateway-2, ... ,default-
gateway-7] interfaceName=interface-name-1[,interface-
name-2, ... ,interface-name-7] hostName=host-name-1[,host-
name-2, ... ,host-name-7]
```

You can specify up to seven of the following parameters, delimited by commas: `macAddr`, `ipAddr`, `subnet`, `gateway`, `interfaceName`, and `hostName`. The number of each of these parameters must be identical. Because parameters are combined in the specified order, make sure that there are no inconsistencies in the combinations. In the deployment template for Linux, the host name must be specified for each IP network interface.

Options (Windows and Linux)

The following common options may be specified with the `DpmCreateTemplate` command.

Option	Description
osType	Specify the operating system of the template to create. • Windows: Create Windows template • Linux: Create Linux template
templateName	Specify the name of the template to create. The following characters can be used: • 1-byte alphanumerics: a-z, A-Z, and 0-9 • 1-byte symbols: - _ • 1-byte spaces • Multi-byte characters (UTF-8) You cannot specify a template name with only numerals and 1-byte spaces. A maximum of 128 characters can be used.
baseTemplateName	Specify the name of the existing template to use for creating a new template. The following characters can be used: • 1-byte alphanumerics: a-z, A-Z, and 0-9 • 1-byte symbols: - _ • 1-byte spaces • Multi-byte characters (UTF-8) You cannot specify a template name with only numerals and 1-byte spaces. A maximum of 128 characters can be used.

Options (Windows)

The following Windows options may be specified with the DpmCreateTemplate command.

If you have specified Linux as the osType common to both operating systems, these parameters are ignored.

Option	Description
hostName	Specify the host name. 1-byte spaces and the following characters cannot be used: . , ` ~ ! @ # $ & * % = + { } \	; : ' " < > / ? [ ] ^ ( ) You cannot specify a host name with only numerals. Multi-byte characters cannot be used. A maximum of 15 characters can be used.
productKey	Specify the Windows product key. Use the following format: *XXXXX-XXXXX-XXXXX-XXXXX-XXXXX* where *X* is a 1-byte alphanumeric.

Option	Description
macAddr	Specify the MAC address of the network interface device. Use the following format: *XX:XX:XX:XX:XX:XX* where *X* is a hexadecimal digit. If you do not have to specify the MAC address explicitly, specify `auto`. A maximum of four MAC addresses can be specified successively, separated with commas. For the succeeding parameters `ipAddr` - `winsServer`, a maximum of four values can be specified successively and combined in accordance with the orders.
ipAddr	Specify the IP address to assign to the device specified in *macAddr*. Use the following format: *N.N.N.N* where *N* is a zero suppress numeric value from 0 to 255. If you want to obtain the IP address automatically, specify `auto`.
subnet	Specify the subnet mask to assign to the IP network interface that was specified in `macAddr` and `ipAddr`. Use the following format: *N.N.N.N* where *N* is a zero suppress numeric value from 0 to 255. If you have specified `auto` for `ipAddr`, you must also specify `auto` for this parameter. If any other value is specified, this value is ignored.
gateway	Specify the IP address of the default gateway to assign to the interface specified in `macAddr` and `ipAddr`. Use the following format: *N.N.N.N* where *N* is a zero suppress numeric value from 0 to 255. If you do not set the default gateway for this interface, specify `none`. If you have specified `auto` for `ipAddr`, you must also specify `auto` for this parameter. If any other value is specified for this parameter, the value is ignored and this parameter is executed as though `auto` is specified.
metric	Specify the metric value to set to the default gateway you specified in the gateway parameter, using integers from 1 to 9,999. If you have specified `auto` or `none` for the default gateway, you must also specify the same value for this parameter. If any other value is specified, this value is ignored and this parameter is executed as though `auto` or `none` is specified.

Option	Description
dnsServer	Specify the IP address of the DNS server to use for the interface specified in `macAddr` and `ipAddr`. Use the following format: *N.N.N.N* where *N* is a zero suppress numeric with a value from 0 to 255. If you want to obtain the DNS server automatically, specify `auto`.
winsServer	Specify the IP address of the WINS server to use for the interface specified in `macAddr` and `ipAddr`. Use the following format: *N.N.N.N* where *N* is a zero suppress numeric with a value from 0 to 255. If you want to obtain the WINS server automatically, specify `auto`.

Options (Linux)

The following Linux options may be specified with the `DpmCreateTemplate` command.

If you have specified Windows as the `osType` common to both operating systems, these parameters are ignored.

Option	Description
primaryDnsServer	Specify the IP address of the primary DNS server. Use the following format: *N.N.N.N* where *N* is a zero suppress numeric with a value from 0 to 255. If you do not set the primary DNS server, specify `none`.
secondaryDnsServer1	Specify the IP address of the secondary DNS server 1. Use the following format: *N.N.N.N* where *N* is a zero suppress numeric with a value from 0 to 255. If you do not set the secondary DNS server 1, specify `none`.
secondaryDnsServer2	Specify the IP address of the secondary DNS server 2. Use the following format: *N.N.N.N*

Option	Description
	where *N* is a zero suppress numeric with a value from 0 to 255.
	If you do not set the secondary DNS server 2, specify `none`.
macAddr	Specify the MAC address of the network interface device. Use the following format:
	XX:XX:XX:XX:XX:XX
	where *X* is a hexadecimal digit.
	If you do not have to specify the MAC address explicitly, specify `auto`.
	A maximum of seven MAC addresses can be specified successively, separated with commas. For the succeeding parameters `ipAddr` - `hostName`, a maximum of seven values can be specified successively and combined in accordance with the orders.
ipaddr	Specify the IP address to assign to the device specified in *macAddr*. Use the following format:
	N.N.N.N
	where *N* is a zero suppress numeric value from 0 to 255.
	If you want to obtain the IP address automatically, specify `auto`.
subnet	Specify the subnet mask to assign to the IP network interface that was specified in `macAddr` and `ipAddr`. Use the following format:
	N.N.N.N
	where *N* is a zero suppress numeric value from 0 to 255.
	If you have specified `auto` for `ipAddr`, you must also specify `auto` for this parameter. If any other value is specified, this value is ignored.
gateway	Specify the IP address of the default gateway to assign to the interface specified in `macAddr` and `ipAddr`. Use the following format:
	N.N.N.N
	where *N* is a zero suppress numeric value from 0 to 255.
	If you do not set the default gateway for this interface, specify `none`.
	If you have specified `auto` for `ipAddr`, you must also specify `auto` for this parameter. If any other value is specified for this parameter, the value is ignored and this parameter is executed as though `auto` is specified.
interfaceName	Specify the name of the interface specified in `macAddr` and `ipAddr`. Compute Systems Manager supports the following Ethernet interface names:

Option	Description
	eth0, eht1, eth2, eth3, eth4, eth5, and eth6
	At least one eth0 must be specified. The same interface name cannot be used for both parameters.
hostName	Specify the host name of the interface specified in `macAddr` and `ipAddr`.
	1-byte spaces and the following characters cannot be used.
	\ / : , ; * ? " < > '	[ ] @
	You cannot specify a host name with only numerals.
	Multi-byte characters cannot be used.
	A maximum of 255 bytes can be specified.
	You can specify individual host names for each network interface; however, if the individual host name is unnecessary, specify the same host name as eth0.

Prerequisites

Do the following in advance:
- Create a base template, which should be used as a template for the deploy template to be created.
  Base templates must be created separately for different operating systems.

Examples (Windows)

The following example shows how to use the `DpmCreateTemplate` command to create a Deployment Template for Windows:

```
client1>csm DpmCreateTemplate osType=Windows
templateName=WindowsTemplate1225
baseTemplateName=Windows2012BaseTemplate hostName=FOO
productKey=12345-12345-12345-12345-12345 macAddr=00:00:87:1A:2B:
3C,00:00:87:4A:5B:6C ipAddr=172.16.0.51,192.168.0.51
subnet=255.240.0.0,255.255.255.0 gateway=172.16.0.1,none
metric=20,none dnsServer=172.16.0.100,auto winsServer=auto,auto

Done.
```

This example creates a Deployment Template for Windows by using the following settings:
- Name of the new template
  `WindowsTemplate1225`

- Name of the base template
  `Windows2012BaseTemplate`

- Host name

```
FOO
```

- Windows product key
  ```
  12345-12345-12345-12345-12345
  ```

- Network parameters
  NIC#1 and NIC#2 represent the two network interface devices for the
  resource to be managed on the copy destination.
  - NIC#1
    MAC address: `00:00:87:1A:2B:3C`
    IP address: `172.16.0.51 /12`
    Default gateway: `172.16.0.1`
    Gateway metric: `20`
    DNS server address: `172.16.0.100`
    WINS server address: Obtain automatically

  - NIC#2
    MAC address: `00:00:87:4A:5B:6C`
    IP address: `192.168.0.51 /24`
    Default gateway: Do not set
    Gateway metric: Do not set
    DNS server address: Obtain automatically
    WINS server address: Obtain automatically

The values of settings other than the above are inherited from the base
template settings.

Examples (Linux)

The following example shows how to use the `DpmCreateTemplate` command
to create a Deployment Template for Linux:

```
client1>csm DpmCreateTemplate osType=Linux
templateName=LinuxTemplate1225
baseTemplateName=RHEL6BaseTemplate primaryDnsServer=172.16.0.101
secondaryDnsServer1=172.16.0.102 secondaryDnsServer2=none
macAddr=00:00:87:1A:2B:3C,00:00:87:4A:5B:6C,00:00:87:7A:8B:9C
ipAddr=172.16.0.51,192.168.0.51,auto
subnet=255.240.0.0,255.255.255.0,auto
gateway=172.16.0.1,192.168.0.1,auto interfaceName=eth0,eth1,eth2
hostName=FOO,BAR,BAZ
```

```
Done.
```

This example creates a Deployment Template for Linux by using the following
settings:
- Name of the new template
  ```
  LinuxTemplate1225
  ```

- Name of the base template
  RHEL6BaseTemplate

- DNS server addresses
  Primary DNS server address: 172.16.0.101
  Secondary DNS server address 1: 172.16.0.102
  Secondary DNS server address 2: Do not set

- Network parameters
  NIC#1, NIC#2, and NIC#3 represent the three network interface devices for the resource to be managed on the copy destination.
  - NIC#1
    Interface name : eth0
    Host name: FOO
    MAC address: 00:00:87:1A:2B:3C
    IP address: 172.16.0.51 /12
    Default gateway: 172.16.0.1

  - NIC#2
    Interface name: eth1
    Host name: BAR
    MAC address: 00:00:87:4A:5B:6C
    IP address: 192.168.0.51 /24
    Default gateway: 192.168.0.1

  - NIC#3
    Interface name: eth2
    Host name: BAZ
    MAC address: 00:00:87:7A:8B:9C
    IP address: Obtain automatically
    Default gateway: Obtain automatically

The values of settings other than the above are inherited from the base template settings.

Return values

Value	Meaning
0	Succeeded in creating the template.
1	Failed to create the template.

DpmDeploy (dpmdeploy)

Use the `DpmDeploy` command to set the deployment template in the snapshot file to create the master image, and then deploy it to the specified managed resources (server, LPAR, and virtual machine).

⚠️ **Note:** You can use the alias `dpmdeploy` in place of the `DpmDeploy` command at any time.

Syntax

```
csm {DpmDeploy | dpmdeploy} macAddr=mac_addresss
snapshotfileName=snapshot_file_name templateName=template_name
[diskNo=disk_number] [partitionNo=partition_number]
[allowForcePowerOff={yes | no}] [schedule={Now | Later
date="YYYY/MM/DD HH:MM:SS"}][notification={send | not_send |
send_only_failed}]
```

Options

The following options may be specified with the `DpmDeploy` command.

Option	Description
macAddr	Specify the MAC address of the resource to deploy in hexadecimal notation. Use the following format: XX:XX:XX:XX:XX:XX where X is a hexadecimal digit. You must specify the MAC address that was detected when you added the managed resource on the management server.
snapshotFileName	Specify the name of the snapshot file that is saved on the management server. Specify the absolute path including the .lbr extension, with up to 128 characters. Use only 1-byte characters. The following characters cannot be used (excluding colons (:) for drive letters). / * ? < > " | : ;
templateName	Specify the name of the template that is saved on the management server. The following characters can be used: • 1-byte alphanumerics: a-z, A-Z, and 0-9 • 1-byte symbols: - _ • 1-byte spaces • Multi-byte characters (UTF-8) A maximum of 128 characters can be used.

Option	Description
diskNo	Specify the number of the disk to deploy. Use an integer from 1 to 1,000. If this option is omitted, the setting you specified at the time of snapshot obtainment is inherited.
partitionNo	If you want to deploy specific partitions in the disk you have specified with `diskNo`, use this option to specify the partition numbers. Use an integer from 1 to 1,000. If this option is omitted, the setting you specified at the time of snapshot obtainment is inherited.
allowForcePowerOff	Specify whether to enable the management server to forcefully turn the power off, if the applicable resource is powered on. `yes`: Enable (forcefully turn the power off) `no`: Do not enable (do not forcefully turn the power off) If you omit this option, the command is executed as though `no` has been selected. Note: This option is equivalent to the Turn the selected resource OFF manually before executing the task check box in the GUI.
schedule	Specify the time to start the deployment. The possible values are `Now` or `Later date`. The default value is `Now`. If this option is omitted, the command is executed as though `Now` has been selected.
date	The date or time when to start deployment when `Later` is specified in the `schedule` option. *YYYY/MM/DD HH:MM:SS* format. This value must be enclosed in double-quotes. This parameter is mandatory when the parameter `schedule=Later date` is specified.
notification	Specify whether email notifications are to be sent when the task is finished. The possible values are `send`, `not_send`, and `send_only_failed`. The default value is `not_send`. If this option is omitted, the command is executed as though `not_send` has been selected.

Prerequisites

Confirm the following in advance:

- The model and the hardware configuration of the master host is the same as those of the destination resource

- The MAC address of the destination resource
  Check the MAC address detected when you added the managed resource to Deployment Manager.

- The disk configuration of the destination resource

The disk number and the partition number displayed on the operating system might differ from those numbers recognized by Deployment Manager. We recommend that you check the numbers recognized by Deployment Manager in advance.

From the GUI, check the MAC address in the list of deployment resources, and check the disk configuration in the disk configuration information for the managed resource to be manipulated.

Do the following in advance:
- Add the destination resource to Deployment Manager

- Obtain a snapshot of the master host
  You must create a snapshot of the master host in advance.

- Create a deployment template for the destination resource
  You must create a deployment template in advance to deploy a master image to the destination resource.

For details on the procedure for adding the managed resource to Deployment Manager, see the *Hitachi Command Suite Compute Systems Manager User Guide*.

Examples

The following example shows how to register a task to deploy a Master Image by setting the Deployment Template in the snapshot image file that was obtained by following the example for the `DpmSnapshot` command

```
client1>csm DpmDeploy macAddr=00:00:87:1A:2B:3C
snapshotFileName=E:\csmcli\SN-2014-12-25.lbr
templateName=WindowsTemplate1225 allowForcePowerOff=yes
schedule=Now notification=send
```

```
400000000005000
```

This example registers a task to deploy a Master Image by using the following settings:
- MAC address of the managed resource to which the Master Image is to be deployed
  ```
  00:00:87:1A:2B:3C
  ```

- Name of the snapshot image file to be used for deployment
  ```
  E:\csm-cli\SN-2014-12-25.lbr
  ```

- Deployment Template name
  ```
  WindowsTemplate1225
  ```

- Disk where the Master Image is to be deployed
  All sectors in disk1 (This is the default value that is used when this option is omitted.)

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- Forced power-off
  Permit

- Date and time when the Master Image is to be deployed
  Deployment starts immediately.

- Email notification
  A notification is always sent regardless of the execution result of the task.

Return values

Value	Meaning
0	Succeeded to schedule the Master Image Deploy task
1	Failed to schedule the Master Image Deploy task

Notes:

- The `DpmDeploy` command replaces the content of the deploy profile of the managed resource that deploys the master image with the content specified by the command. After the command is executed, the content specified by the command is reflected on the GUI.

- Only the snapshot image file managed by Deployment Manager can be used for deployment. Image files on the file system of the management server cannot be used if these files are not managed by Deployment Manager. To use snapshot image files that are saved on other management servers, import these snapshot image files to Deployment Manager. For details on how to import image files, see the *Hitachi Command Suite Compute Systems Manager User Guide*.

3

Troubleshooting

This section includes troubleshooting information for the Hitachi Compute Systems Manager command line interface (CLI).

☐ Troubleshooting JRE issues

Troubleshooting JRE issues

If you execute CLI commands in a client environment in which JRE is version 5 or earlier, the system generates the following errors:

```
Exception in thread "main"
java.lang.UnsupportedClassVersionError: Bad version number
in .class file
at java.lang.ClassLoader.defineClass1(Native Method)
at java.lang.ClassLoader.defineClass(ClassLoader.java:621)
at
java.security.SecureClassLoader.defineClass(SecureClassLoader.jav
a:124)
at java.net.URLClassLoader.defineClass(URLClassLoader.java:260)
at java.net.URLClassLoader.access$100(URLClassLoader.java:56)
at java.net.URLClassLoader$1.run(URLClassLoader.java:195)
at java.security.AccessController.doPrivileged(Native Method)
at java.net.URLClassLoader.findClass(URLClassLoader.java:188)
at java.lang.ClassLoader.loadClass(ClassLoader.java:307)
at sun.misc.Launcher$AppClassLoader.loadClass(Launcher.java:268)
at java.lang.ClassLoader.loadClass(ClassLoader.java:252)
at java.lang.ClassLoader.loadClassInternal(ClassLoader.java:320)
```

To correct this issue:

1. Make sure that a version of JRE supported by the CLI is installed on the client machine on which you are running the CLI commands.
2. Verify that the environment variable HCSM_CLI_JRE_PATH specifies the path of the installed JRE that you verified in step 1.
3. Open the command prompt again, and run the commands.

A

Display format

This appendix covers the display format of the CLI commands.

☐ [Display format of Get- commands](#)

Display format of Get- commands

The results of commands that begin with "Get" are displayed in one of the following formats depending on the `-format` option specified.

- Tabbed text (when the `-format` option is omitted)

- CSV (when the `-format csv` option is specified)

- Headerless CSV (when the `-format csv-no-header` option is specified)

- XML (when the `-format xml` option is specified)

The following explains these formats and shows examples of the result of the commands.

- Tabbed text display format:

```
major-item-name Instance
   minor-item-name#1: value-of-minor-item-name#1
   minor-item-name#2: value-of-minor-item-name#2
     ...
major-item-name Instance
   minor-item-name#1: value-of-minor-item-name#1
   minor-item-name#2: value-of-minor-item-name#2
```

The following displays the `GetHost` command output in tabbed text format:

```
Host Instance
   hostName: HostSystem1
   osName: Microsoft Windows Server 2008 R2 Enterprise
   manufacturer: Hitachi
   ipAddress: 172.17.79.48
   productName: ComputeBlade 520HB1
   hostStatus: Running
   serialNumber: JPA308GF71
   lastRefreshed: 2015-01-22 12:05:01
   error: 46
   warning: 38
   information: 28
Host Instance
   hostName: HostSystem2
   OsName: Microsoft Windows Server 2008 R2 Enterprise
   manufacturer: Hitachi
   ipAddress: 172.17.79.49
   ...
```

- CSV display format:

```
minor-item-name#1, minor-item-name#2, ...
value-of-minor-item-name#1, value-of-minor-item-name#2 ...
value-of-minor-item-name#1, value-of-minor-item-name#2 ...
   ...
```

The following displays the `GetMemory` command output in CSV format:

```
hostName,totalSizeInMB,maxPageFileSizeInMB
HostSystem1,16258.9,16258.0
HostSystem2,8000.9,8000.0
```

- Headerless CSV display format:

```
value-of-minor-item-name#1, value-of-minor-item-name#2 ...
value-of-minor-item-name#1, value-of-minor-item-name#2 ...
...
```

The following displays the `GetMemory` command output in headerless CSV format:

```
HostSystem1,16258.9,16258.0
HostSystem2,8000.9,8000.0
```

- XML display format:

```
<result>
<major-item-name>
  <minor-item-name#1>value-of-minor-item-name#1</minor-item-
name#1>
  <minor-item-name#2>value-of-minor-item-name#2</minor-item-
name#2>
  ...
</major-item-name>
<major-item-name>
  <minor-item-name#1>value-of-minor-item-name#1</minor-item-
name#1>
  <minor-item-name#2>value-of-minor-item-name#2</minor-item-
name#2>
  ...
</major-item-name>
...
</result>
```

The following displays the `GetHost` command output in XML format:

```
<?xml version="1.0" encoding="MS932"?>
<result>
  <Host>
    <hostName>HostSystem1</hostName>
    <osName>Microsoft Windows Server 2008 R2 Enterprise</
osName>
    <manufacturer>Hitachi</manufacturer>
    <ipAddress>172.17.79.48</ipAddress>
    <productName>ComputeBlade 520HB1</productName>
    <hostStatus>Running</hostStatus>
    <serialNumber>JPA308GF71</serialNumber>
    <error>46</error>
    <warning>38</warning>
    <information>28</information>
  </Host>
  <Host>
    <hostName>HostSystem2</hostName>
```

```
        <manufacturer>Hitachi</manufacturer>
        <ipAddress>172.17.79.49</ipAddress>
        ...
    </Host>
        ...
    </result>
```

Index

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