Oracle® Enterprise Manager Ops Center

Command Line Interface

12*c* Release 3 (12.3.2.0.0)

E59976-03

June 2016

ORACLE

Oracle Enterprise Manager Ops Center Command Line Interface, 12c Release 3 (12.3.2.0.0)

E59976-03

Primary Authors: Krithika Gangadhar, Daniel Garza

Contents

Index

Preface

The *Oracle® Enterprise Manager Ops Center Command Line Interface Guide* describes the commands usage for the Oracle Enterprise Manager Ops Center command-line interface.

Audience

This document is intended for users who require a detailed description of the functionality of the command-line interface. The reader should already be familiar with Oracle Enterprise Manager Ops Center.

Related Documents

For more information, see the Oracle Enterprise Manager Ops Center Documentation Library at `http://docs.oracle.com/cd/E59957_01/index.htm`.

Oracle Enterprise Manager Ops Center provides online Help. Click Help at the top-right corner of any page in the user interface to display the online help window.

For the latest releases of Oracle documentation, check the Oracle Technology Network at: `http://www.oracle.com/technetwork/documentation/index.html#em`.

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Command Line Interface

The Oracle Enterprise Manager Ops Center Command Line Interface (CLI) is an alternative to the browser user interface for Oracle Enterprise Manager Ops Center.

This chapter explains how to use the Oracle Enterprise Ops Center CLI and all the commands included within this tool:

CLI Features

The Oracle Enterprise Manager Ops Center CLI can perform many, but not all, functions of Oracle Enterprise Manager Ops Center.

The following charts compare the product features in the BUI and CLI:

Asset Discovery, Management, and Grouping

You can perform some but not all discovery and asset management tasks through the Oracle Enterprise Manager Ops Center's command line.

Table 1-1 shows the functions that the CLI can perform for asset discovery, management, and grouping.

Table 1-1 Asset Discovery, Management, and Grouping

Function	Possible with CLI	Mode
Find asset	Yes	Discover
Execute discovery profiles	Yes	Discover

Table 1-1 (Cont.) Asset Discovery, Management, and Grouping

Function	Possible with CLI	Mode
Add asset	No	n/a
Declare asset	No	n/a
Manage asset	Yes	Gear
Unmanage asset	Yes	Gear
Register asset	Yes	Gear
View asset data	Yes	Gear
Update asset data	Yes	Gear
Reset a server	Yes	Gear
Refresh a server	Yes	Gear
Manage locator lights	Yes	Gear
Manage power settings	Yes	Gear
Reboot an OS	Yes	Gear
Reinstall an asset on an OS	Yes	Gear
Create a group	Yes	Groups
Add asset to a group	Yes	Groups
Move assets between groups	Yes	Group
Manage power settings of an asset in a group	Yes	Group
Delete a group	Yes	Group
Delete an asset	Yes	Gear
Upgrade an Agent on an Asset	Yes	Gear
Upgrade all Agents needing an upgrade	Yes	Gear

Operating System Provisioning and Patching

You can provision and update operating systems through the Oracle Enterprise Manager Ops Center's command line.

Table 1-2 shows the functions that the CLI can perform for operating system provisioning and patching.

Table 1-2 Operating System Provisioning and Patching

Function	Possible with CLI	Mode
Import an OS image	Yes	OSImage

Table 1-2 (Cont.) Operating System Provisioning and Patching

Function	Possible with CLI	Mode
Delete an OS image	Yes	OSImage
Create an OS profile	No	n/a
Import an OS profile	Yes	OSProfile
Export an OS profile	Yes	OSProfile
Clone an OS profile	Yes	OSProfile
Delete an OS profile	Yes	OSProfile
Import a JET template	Yes	OSProfile
Provision an OS	Yes	Gear
Check inventory	Yes	Update
Upload a knowledge base bundle	Yes	Update
Update operating systems	Yes	Update
Create OS update profiles	Yes	Update
Apply OS update profiles	Yes	Update
Add a configuration file	Yes	Update
Add a file to a distribution	Yes	Update
Run OS update profiles	No	n/a

Firmware Provisioning

You can provision firmware through the Oracle Enterprise Manager Ops Center's command line.

Table 1-3 shows the functions that the CLI can perform for firmware provisioning.

Table 1-3 Firmware Provisioning

Function	Possible with CLI	Mode
Create a firmware image	Yes	FWImage
Update a firmware image	Yes	FWImage
Delete a firmware image	Yes	FWImage
Create a firmware profile	Yes	FWProfile
Update a firmware profile	Yes	FWProfile
Delete a firmware profile	Yes	FWProfile
Update firmware	Yes	Gear

Table 1-3 (Cont.) Firmware Provisioning

Function	Possible with CLI	Mode
Check firmware compliance	Yes	Gear
Run firmware reports	No	n/a

Administration

Some administration tasks can be performed through the Oracle Enterprise Manager Ops Center's command line.

Table 1-4 shows the functions that the CLI can perform for administration.

Table 1-4 Administration

Function	Possible with CLI	Mode
Change connection mode	Yes	Update
Deploy a Proxy Controller	No	n/a
Manage users and roles	Yes	User
View roles	Yes	Jobs
Manage jobs	Yes	Jobs
View notifications	Yes	Notifications
Delete notifications	Yes	Notifications
Manage incidents	Yes	Incidents

Start the Command Line Interface

You can use the command line interface of the Oracle Enterprise Manager Ops Center to perform operations.

Topics

Requirements for Command Line Interface

The Oracle Enterprise Manager Ops Center's command line has prerequisites.

Because the CLI share information with the Enterprise Controller, you must create the connection between the CLI to the Enterprise Controller. When you run the CLI on the same system as the Enterprise Controller, the connection does not need credentials,

but when the CLI runs on a different system than the Enterprise Controller's system, you must provide the system's credentials.

When connecting from a remote system, the CLI verifies that the certificate of the Enterprise Controller's server is in the list of trusted certificates. For new connections or after reinstalling the Enterprise Controller, you must accept the server's certificates to establish the connection. The certificates are then stored in a local trust store for the user and do not require acceptance again. For more information about certificates, see Certificates.

You must have Java SE Development Kit (JDK) 7 or 8 installed in the system running the CLI.

Invoking the Command Line Interface

You can invoke the Oracle Enterprise Manager Ops Center's command line from the Enterprise Controller's server or from a remote server.

1. Navigate to the location of the command line interface for your operating system:
   a. Oracle Solaris: `/opt/SUNWoccli/bin`
   b. Linux: `/opt/sun/occli/bin`
2. Enter the `oc` command.

```
# ./oc
xvmSh>
```

3. Enter the `connect` command.
   a. If you are logged on the system that runs the Enterprise Controller, issue the following command:

```
xvmSh >connect
localhost >
```

   b. If you are logged on a different system from the system running the Enterprise Controller, issue the `connect` command with the following syntax. If you do not include the `-h`, `-u`, and `-p` options, you are prompted for the Enterprise Controller's hostname, your user name, and password

```
xvmSh >connect -h <host of enterprise controller> -u <user name> -p
<password>|-p @<filename for password
localhost >
```

4. For new connections or after reinstalling the Enterprise Controller, you must accept the server's certificates to establish the connection. The certificates are then stored in a local trust store for the user and do not require acceptance again. You can use the `-a| --accept-all-certificates` option to accept all certificates by default and not receive confirmation.

The CLI is connected to the Enterprise Controller.

Using the oc Command

You can initiate the Oracle Enterprise Manager Ops Center's command line with various options.

The CLI is accessed with the `oc` command. The `oc` command can be run with the following options:

- Use `-V| --version` to show the CLI version and exit.
- Use `-h| --help` to show the CLI help and exit.
- Use `-q| --quiet` to be as quiet as possible.
- Use `-d| --debug <debug level>` to specify a debug logging level. Debug logging levels are `DEBUG`, `FINEDEBUG`, `CMDSTAT`, `INFO`, `WARNING`, `ERROR`, `CRITICAL`, `OFF`, and `ALL`.
- Use `-c| --cmdfile <file>` to execute the `<file>` command file.
- Use `-e| --eval <command>` for one-line execution. The `<command>` command is the only command to be executed. This option can be run with one-liners. For more information about one-liners see Using the CLI One-Liner.
- Use `-o| --outfile <file>` to write the output to the `<file>` file.
- Use `-O| --output_format <format>` to specify an output format. Format can be `text` of `parsable`.

Examples:

```
#./oc -V
OpsCenter Command Line Interface 12.1.0

#./oc -e history
495 connect
496 version
```

Defining User Variables

You can set variables and use them with any Oracle Enterprise Manager Ops Center command.

To define a user variable, enter `set <variable name>=<value>` in the command prompt.

Example:

```
#./oc
xvmSh> set JOBID=foo.3
xvmSh> connect
localhost> jobs.list -x $JOBID
```

Using the CLI One-Liner

You can provide a series of commands on the Oracle Enterprise Manager Ops Center's command line.

The CLI accepts a list of commands as an argument.

Enter the following command:

```
./oc -e 'list commands separated by a semicolon'
```

Example:

```
#./oc -e 'connect ; jobs.list | grep FAILED'
```

General Commands

Use general commands used for CLI execution or as universal commands through the Oracle Enterprise Manager Ops Center's command line.

Use the Tab key to see a list of the available commands or as a completion key when typing a command.

- Checking Connectivity
- Displaying User Configuration
- Setting the User Environment
- Recording Console Input and Output
- Using a Source File
- Viewing the Version
- Waiting for a Job to Complete
- Reviewing Commands
- Viewing Help
- Displaying a Man Page
- Ending a Mode
- Disconnecting from Oracle Enterprise Manager Ops Center
- Exiting the CLI

Checking Connectivity

You can verify your connection to the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

The `ping` command checks connectivity to the Enterprise Controller.

```
localhost > ping
OEMEC None is alive, version : 12.1.0.1848
```

Displaying User Configuration

You can view the user configuration through the Oracle Enterprise Manager Ops Center's command line.

Use the `printenv` command to display the definitions for the following variables in the user configuration:

- `output_format`: Format for the command output, either text or parsable.
- `parsable_text_separator`: Text separator for parsable command output.
- `log_level`: Logging level.

- `history_length`: Number of commands saved in the history.
- `debug`: Debug logging, either true or false.
- `pager`: Pager for long output, either true or false.
- `continue_on_error`: Continue when a command fails, either true or false.
- `text_wrap_width`: Maximum number of characters in a line.
- `accept_all_certificates`: Enable or disable accepting all certificates by default, either true or false.

To display the current user configuration, enter `printenv` in the command prompt.

Example:

```
localhost > printenv
output_format=textparsable_text_separator=log_level=OFFhistory_length=500debug=falsep
ager=falsecontinue_on_error=falsetext_wrap_width=-1
accept_all_certificates = false
```

The user configuration can be changed using the `setenv` command.

Setting the User Environment

You set variables for the environment through the Oracle Enterprise Manager Ops Center's command line.

The `setenv` command sets the following variables in the following ways:

```
output_format=text|parsable
parsable_text_separator=text
log_level=OFF|ON
history_length=integer
debug=true|false
pager=true|false
continue_on_error=true|false
text_wrap_width=integer
accept_all_certificates = true|false
```

To set the user environment, enter `sentenv <variable>=<value>` in the command prompt. For example:

```
localhost > setenv pager=true
```

Note:

It's preferable to set the pager variable to `true` before running some commands, such as the `man` command.

Recording Console Input and Output

You can copy all console inputs and outputs to a text file using the Oracle Enterprise Manager Ops Center's command line.

You can save the resulting file in the directory you prefer. Issue the command without a file name to stop the recording.

To record the console inputs and outputs into a text file, enter `record <filename>` at the command prompt, for example:

```
localhost > record foo.file
```

Use the Tab key to close the file.

Using a Source File

You can use a command script on the Oracle Enterprise Manager Ops Center's command line.

The `source` command uses command script files to source commands as if they were entered at the prompt. For more information about command scripts, see Command Scripts. This command is also used to specify a file as the source of an operation when executing other commands. This file can be used for information that is shared by more than one script, or to keep secure information separate.

To use a source file, enter `source <filename>` in the command prompt.

Example:

```
EnterpriseControler > source /tmp/cmds
```

Viewing the Version

You can display the product version through the Oracle Enterprise Manager Ops Center's command line.

The `version` command displays the version of the CLI, the Oracle Enterprise Manager Ops Center software, the Java SE Runtime Environment, and the Java HotSpot Server VM software, for example:

```
localhost > version
CLI version: 12.3.2.805
OpsCenter version: 12.3.2.805
Platform: Java-1.8.0_66-Java_HotSpot-TM-_64-Bit_Server_VM,_25.66-
b17,_Oracle_Corporation-on-SunOS-5.11-amd64
Jython Version: 2.7.0
```

Waiting for a Job to Complete

You can control the timing of commands in the Oracle Enterprise Manager Ops Center's command line.

You can set the CLI to wait until either the most recent job or a specific job finishes before launching a new job, using the `wait` command. This can be useful if one job, such as a discovery, is a requirement for another job, such as grouping or managing discovered assets. You can identify a job by its jobID or by its runID.

The `wait` command is used in command scripts where many commands are run almost at the same time, and a command must wait to be executed until the job launched by the previous command is completed. For more information about command scripts, see Command Scripts. This command can be used from within any mode at any time or from the main command line.

To wait for a job to complete, enter `wait` in the command prompt.

Use the `-i| --jobid <job ID>` option to specify a job ID. The CLI waits for that job to complete.

Use the `-r| --runid <run ID>` option to specify a job runID. The CLI waits for that job to complete. Default is to wait for the last job.

Use the `-a| --all` option to wait for all jobs.

Use the `-n| --maxwait <maximum wait time>` to specify a timeout, a maximum number of seconds to wait for a job to complete.

Note:

To interrupt a wait operation during interactive session, press Ctrl+C.

Viewing Help

You can show the commands in the Oracle Enterprise Manager Ops Center's command line.

This command can be used from within any mode at any time or from the main command line.

To show the available commands, enter `help` in the command prompt.

Use the `-l` option to include detailed usage information.

Reviewing Commands

You can display recent commands. through the Oracle Enterprise Manager Ops Center's command line.

This command can be used from within any mode at any time or from the main command line. To show the recent commands, enter `history` in the command prompt. Use the `-n <number of commands>` option to limit the history list, for example:

```
localhost > history -n 3
```

The history includes a command number for the sequence. To repeat a command in the history enter the `!` character with the command number and press the Tab key, as shown in the following example:

```
localhost> history -n 3
495 connect
496 version
498 history -n 3
localhost>!496 <TAB>
localhost>version
```

Displaying a Man Page

You can display the man page for a specific mode through the Oracle Enterprise Manager Ops Center's command line.

The syntax usage and description for all mode subcommands are included in the man page. This command can be used from within any mode at any time or from the main command line. To display the man page for a specific mode, enter `man <mode name>` in the command prompt. For example, to learn about the `gear` command:

```
localhost > man gear
```

If no mode name is given, the CLI man page is displayed.

To see a list of man pages, enter the command and press the Tab key.

Note:

The `man` command requires the `pager` environment variable to be set to `true` for multipage output before being run. For more information about how to set the `pager` variable, see Setting the User Environment.

Ending a Mode

You can return to the parent prompt in the Oracle Enterprise Manager Ops Center's command line.

You can exit a mode and return to the parent CLI prompt, using the `end` command. This command can be used from within any mode at any time or from the main command line. To exit a mode, enter `end` in the command prompt.

```
localhost/gear > end
localhost >
```

Disconnecting from Oracle Enterprise Manager Ops Center

You can close the network connection between the Enterprise Controller and the Oracle Enterprise Manager Ops Center Command Line Interface.

To disconnect from the Enterprise Controller, enter `disconnect` in the command prompt.

Example:

```
localhost > disconnect
xvmSh >
```

Exiting the CLI

You can exit the Oracle Enterprise Manager Ops Center's command line from any mode.

The `exit` command can be used from within any mode at any time or from the main command line. For example:

```
localhost > exit
```

Universal Output Filters

You can limit the output of any mode through the Oracle Enterprise Manager Ops Center's command line.

For any main or mode command, you can constrain the output by appending one of the following filters to the command:

- `| grep` *regexp* to filter by the regular expression
- `| count` *integer* to display only the number of output lines
- `| tee` *filename* to write the output to a file

Example:

```
localhost/jobs > list | tee /var/tmp/todays_jobs.txt
```

Note:

For better results with `grep` and `count` filters, activate parsable output, using the `setenv` command.

Spaces are required before and after the pipeline " | " character

Command Scripts

You can create scripts through the Oracle Enterprise Manager Ops Center's command line.

The CLI can also be used in a non-interactive way, using command scripts. The following example shows a script named `update.xvm` that writes the inventory of a server to a file:

```
connect finance_svr -u zz3282134 -p b@seba11
update
csv_inventory -h finance_svr -f ~/inventory_latest.csv
wait
end
```

To create the file at any time, issue the following command:

```
oc --cmdfile update.xvm
```

To run a command script use the `source` command.

Example:

```
xvmSh > source update.xvm
```

Mode Commands

You use the modes of the Oracle Enterprise Manager Ops Center's command line to manage assets.

The commands in this section start a mode that includes a set of subcommands. Use the `man` command to display the man page for each mode.

- Certificates – Use certificates mode to view and manage trusted certificates.
- Collisions – Use collisions mode to detect collisions of host IDs or MAC addresses used by logical domains.
- Controller – Use controller mode to migrate assets from one Proxy Controller to another Proxy Controller.
- Credentials – Use credentials mode to view and manage driver credentials.
- Deploy-Setup – Use deploy-setup mode to set up the plan and target to deploy an asset.
- Deploy – Use deploy mode to deploy an asset.
- Discover – Use discovery mode to discover gear (assets).
- FWImage – Use fwimage mode to create, view, and manage firmware images.
- FWProfile – Use fwprofile mode to create, view, and manage firmware profiles.

- Gear – Use gear mode to view and manage gear (assets) and provision operating systems and firmware.
- Groups – Use groups mode to view, create, and manage groups.
- Guest – Use guest mode to view Oracle Solaris zones including kernel zones and Oracle VM Server for SPARC logical domains, and control their actions.
- Incidents – Use incidents mode to view and manage incidents.
- Jobs – Use jobs mode to view and manage jobs.
- Monitoring – Use monitoring mode to manage monitoring services.
- Networks – Use networks mode to display the list of managed networks.
- Notifications – Use notifications mode to view notifications and change notification settings.
- OSImage – Use osimage mode to view, manage, and install OS images.
- OSProfile – Use opsrofile mode to view, manage, and import OS profiles.
- Plan – Use plan mode to list and remove deployment plans.
- Reports – Use reports mode to manage the reporting service.
- Security – Use security mode to update certificates before they expire.
- Serverpools – Use serverpools mode to view, and manage server pools.
- Stats – Use stats mode to view statistics about the Enterprise Controller.
- Update – Use update mode to view and manage OS update profiles, policies, snapshots, and distributions, and view and change the connection mode.
- User – Use user mode to create, view and manage users and roles.
- Virtualization – Use virtualization mode to view, and manage virtual hosts and virtual machines.

Unlike the `ecadm` and `proxyadm` commands, which are used for administering the Enterprise Controller and its Proxy Controllers, the CLI operates on the assets of the data center.

To execute a subcommand within a mode:

- Enter the mode, then enter the subcommand.
- Enter `<mode name>.<subcommand name>`.

  Example:

  ```
  localhost > jobs.list
  ```

For information about the mode commands that have a corresponding action in the browser user interface, see Finding the Equivalent Browser User Interface Actions For the Mode Commands.

Certificates

The certificates mode manages security through the Oracle Enterprise Manager Ops Center's command line.

Certificates mode allows you to view and manage the list of trusted certificates that enable the communication between the Enterprise Controller and the product's Command Line Interface. The CLI is a client of the Enterprise Controller in remote connections. The CLI does not check for certificates in local connections.

For information about certificates that enable authorization among the Enterprise Controller, Proxy Controllers, and assets, see Security mode.

Certificates are stored in a truststore file in the user directory. When connecting to an EC remotely, the CLI verifies if the certificate chain of the EC server is part of the trusted list. If the certificate chain is not in the trusted list, then the CLI requests to accept the new certificate to add it to the list. If the certificate chain is not accepted, then the connection fails.

Additionally, you can set your user environment to silently accept all certificates by setting the `accept_all_certificates` variable to true, see Setting the User Environment for more information in changing the value of the variable. You can also set your connection to silently accept all certificates by using the `-a or --accept_all_certificates` option with the `connect` command. This is especially useful for non-interactive sessions where it is not possible to interactively accept the certificate.

To enable your scripts to connect to a remote server, you can choose from the following options:

- If you reinstall your EC and CLI often, modify your scripts to add the `-a or --accept_all_certificates` option to the connect command to make them pass-through.
- If you reinstall your EC often but not the CLI, you might prefer to change the new CLI preference `accept_all_certificates` to automatically accept certificates at all times for all servers to which it connects. You can also add the following line at the beginning of each script to add the certificate, although this command connects to the EC and then disconnects: `certificates.add -h hostname -u username [-n port] -p password -f`.
- If you do not reinstall your EC often, then you can connect to the EC interactively to accept the certificate at the user level which adds it to the user's truststore. In this case you will need to connect interactively to it after each reinstall of your EC to accept its new certificates.

Viewing Certificates

You can view the list of existing trusted certificates through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list`.

```
xvmSh/certificates > list
         Alias          |      Issuer           |        Subject          |
Serial Number
-------------------------------------------------------------------------------
-------------------------
  root@sm-36:11172      |   CN=sm-36_oem-ec_ca  |  CN=sm-36_oem-ec_ca     |
```

```
385822055
  root@sm-36:11172      |   CN=sm-36_oem-ec_ca  |  CN=sm-36_oem-ec_agent  |
1497938285
```

Use the `-a| --alias <alias>` option to list a specific alias or a list of aliases separated by a comma.

Use the `-d| --detail` option to include detailed certificate information.

Adding Certificates

You can add a certificate to the trusted list through the Oracle Enterprise Manager Ops Center's command line.

- Enter `add -h| --hostname <EChostname> -u| --username <username>`

```
xvmSh/certificates > add -h sm-37 -u root
Enter password for authentication > ********
Untrusted certificate encountered. Create an exception to accept it at each
connection? [Display/Yes/No] y
Certificate chain added for root@sm-37:11172
```

Use the `-p| --pass <password>` option to add without entering the user password interactively.

Use the `-f| -- force` option to add without receiving any confirmation message, useful for scripts where no interaction is possible.

Use the `-n| --port <port_number>` option to add the port number to use.

Deleting Certificates

You can delete a certificate from the trusted list through Oracle Enterprise Manager Ops Center's command line.

- Enter `remove -a|--alias <alias>`

```
xvmSh/certificates > remove -a root@sm-37:11172
xvmSh/certificates >
```

Collisions

The collisions mode detects duplicate addresses through the Oracle Enterprise Manager Ops Center's command line.

This module is about detecting collisions of host IDs and MAC addresses used by logical domains managed by Oracle Enterprise Manager Ops Center. A collision is an occurrence of a duplicated host ID or MAC address used by two or more logical domains.

You can run this command to detect host ID or MAC address collisions of logical domains existing in the Enterprise Controller.

This command also allows you to detect if specific host IDs or MAC addresses collide with host IDs or MAC addresses used by logical domains inside the Enterprise Controller. This functionality is specially useful to prevent collisions before adding logical domains created outside of Enterprise Manager Ops Center. You can either provide a file containing data of the logical domains or provide the host IDs or MAC addresses as part of the command.

Additionally, you can reserve a number of MAC addresses from a specified range. You can use the reserved MAC addresses to assign them to a future logical domain to

guarantee it will not collide with another MAC address used inside the Enterprise Controller.

Viewing Conflicts of Host IDs or MAC Addresses for Logical Domains

You can list all collisions detected for all existing logical domains

You can filter the list by type of collisions detected for host IDs or MAC addresses.

Enter `list -t|--type <all|hostid|macaddres>`

```
xvmSh/collisions > list -t hostid
Collision on hostid 84ffb4b4  :
      Server          |        Name         |                  UUID
|          MAC
-------------------------------------------------------------------------------
---------------------------
  foo.example.com     |     ldom_guest      | a2478fdd-62f8-c4af-afdd-e2d93cc93abb
|   00:14:4F:FB:5D:0E
  foo.example.com     |     ldom_guest1     | 7db50419-d46d-4351-b7f7-ba7d5f1c76fd
|   00:14:4F:FF:B4:B4
```

Verifying Collisions Using a File Containing Logical Domain Data

You can verify whether host IDs or MAC addresses collide with a host ID or MAC address used by logical domains managed by Enterprise Controlle

You can specify the name of the file containing data of logical domains to check them for possible collisions.

Enter `list -t|--type <all|hostid|macaddres> -f|--file <filename>`

```
xvmSh/collisions > list -t hostid -f dumpldoms.txt
Collision on hostid 84ffb4b4  :
    Server       |    Name               |            UUID
|        MAC

-------------------------------------------------------------------------------
---------------
foo.example.com  | ldom_guest            | a2478fdd-62f8-c4af-afdd-e2d93cc93abb  |
00:14:4F:FB:5D:0E
foo.example.com  | guest-inter-collision |  544fe468-90a8-66ce-990f-bb4b79842fa9 |
00:14:4F:FA:2D:E1
```

You can run the script `/opt/sun/n1gc/bin/read_mac` on managed Oracle VM for SPARC control domains to collect their logical domains data. You can send the output of the script to a file and then use that file as part of the `-f|--file` option.

Verifying Collisions Using Specific Host IDs or MAC Addresses

You can verify if the specified host IDs or MAC addresses collide with a host ID or MAC address used by logical domains through the Oracle Enterprise Manager Ops Center's command line.

You can choose to filter the list by type of collisions for either host IDs or MAC addresses.

Verifies if the specified host IDs or MAC addresses collide with a host IDs or MAC addresses used by logical domains inside the Enterprise Controller. This command identifies different levels of collisions:

- Severe – For host ID collisions between two or more logical domains.

- Warning – For MAC address collisions between two or more vnets of logical domains, including alternate MAC addresses of the vnets.
- Info – For MAC address collisions between vnets of logical domains and logical domain MAC addresses.

Enter `check -t|--type <hostid|macaddres> -v|--value <values>`

```
xvmSh/collisions > check -t macaddress -v 0:14:4F:FB:5D:0E,00:14:4F:FA:2D:E1
Collision Level - INFO :
           Server            |            Name            |
UUID                 |        MAC
-------------------------------------------------------------------------------
--------------------------------------
  foo.example.com             |        ldom_guest           |  a2478fdd-62f8-c4af-
afdd-e2d93cc93abb  | 00:14:4F:FB:5D:0E
  foo.example.com             |    ldom_guest_2_collision    |  3c526eeb-f38c-c169-
ed1c-88a0825e7a38  | 00:14:4F:FB:5D:0E
```

Reserving MAC Addresses from a Network Range

You can reserve a number MAC addresses from a MAC address network range through the Oracle Enterprise Manager Ops Center's command line.

You can reserve MAC addressed from the manual or automatic range.

Enter `allocate -n|--size <number> -r|--range <manual|auto>`

```
xvmSh/collisions > allocate -n 2 -r manual
Allocated MAC addresses:
       MAC Address       |
-------------------------
    00:14:4F:FD:5C:AD
    00:14:4F:FF:05:E5
```

Controller

You can migrate assets from a failed Proxy Controller through the Oracle Enterprise Manager Ops Center's command line.

Use Controllers mode to evacuate the assets managed by a failed Proxy Controller to other available Proxy Controllers. This mode also allows you to view the available Proxy Controllers that you can use to evacuate the assets.

Viewing Controllers

You can view a list of Proxy Controllers, the Enterprise Controller, and Virtualization Controllers through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list`.

```
localhost/controllers > list
Controller list:
     Name     |                UUID                |Status     |   Version   |
-------------------------------------------------------------------------------
192.0.2.95-PC | abcd76fd-28be-abcd-8uae-abcd20b780e1 |MAINTENANCE| 12.1.4.2311|
192.0.2.97-PC | abcdcdab-7654-abcd-a781-abcd96791054 |   OK      | 12.1.4.2311|
192.0.297-EC  | abcd2f30-ef67-abcd-ab12-abcd9b6ab671 |   OK      | 12.1.4.2311|
x44-VC        | abcde955-1edt-abcd-adi5-abcdgg1e74e6 |   OK      | 12.1.4.2311|
```

Setting the Maintenance Mode of a Proxy Controller

You can place a Proxy Controller in maintenance mode or remove a Proxy Controller from maintenance mode through the Oracle Enterprise Manager Ops Center's command line.

- Enter `set_maintenance -U| --UUID <proxyuuid> –m on|off|`.

  Use the `on` option to set the asset in maintenance mode.

  Use the `off` option to unset the maintenance mode of an asset.

While in maintenance mode, a Proxy Controller continues to manage assets but cannot discover new assets or act as a target for asset migration, and incidents are not generated for the Proxy Controller.

Evacuating Assets From a Failed Proxy Controller

You can move assets from a failed Proxy Controller through the Oracle Enterprise Manager Ops Center's command line.

You can evacuate the assets managed by a failed Proxy Controller to other available Proxy Controllers. The Proxy Controller to which the assets can be migrated is determined by the networks managed by the available Proxy Controllers and their load.

- Enter `migrate_assets -U| --UUID <proxy_uuid>`.

```
localhost/controllers > migrate_assets -U h4fm76fd-28be-4892-8uae-4i8b20b780e1
```

Warning:

The failed Proxy Controller will be removed after the job launched by this command is finished.

Credentials

You can perform operations on credentials through the Oracle Enterprise Manager Ops Center's command line.

Use the Credentials mode to view and manage the driver credentials necessary to discover and manage assets. The credentials also help to establish trust between internal components.

Viewing Credentials

You can view a list of existing driver credentials through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list`.

```
localhost/credentials > list
Driver Credentials:
 ID  |      Name        |   Type   |       Description       |
-------------------------------------------------------------
6850 |     admin        |    SSH   |   root/admin SSH creds  |
6840 |   occosIPMI      |   IPMI   |          IPMI           |
```

Use the `-i| --ids <credential IDs>` option to give a specific credential ID or a list of credential IDs. IDs must be separated by a comma.

Use the `-l|--detail|` option to include detailed credential information.

Use the `-a|--assigned` option to include a list of assets that use the credential.

Modifying Credential Details

You can modify the values of a driver credential through the Oracle Enterprise Manager Ops Center's command line.

The `modify` command starts a submode with its own set of subcommands.

1. Enter `modify -i| --id <credential ID>`.

```
localhost/credentials > modify -i 6840
localhost/credentials/modify >
```

2. (Optional) Use the `show` command to display the current properties of the credential.

```
localhost/credentials/modify > show
description=IPMI
*sharedSecret=*****
*login=IPMI_user
*name=occosIPMI
```

Note:

Properties marked with an asterisk (*) at the beginning are mandatory.

3. Enter `set <property>=<value>` to modify a property value of the credential.

```
localhost/credentials/modify > set name=IPMI_cred
```

4. If necessary, use the `unset <property>` command to unset a property or the `reset` command to reset all properties.

5. Use the `commit` command to apply the change.

Assigning Credentials

You can assign a set of credentials to a managed asset, changing their credentials through the Oracle Enterprise Manager Ops Center's command line.

Enter `assign -i|--id` *`credential_id`* `-U|--uuid` *`asset_uuid`* `-g|--gear=`*`assetname`* `-d|--discoverIP` *`IPaddress`* to assign a new credential to the specified asset. You specify the asset by either its UUID or its asset name if it is unique. You must also include the IP address that was used to discover the asset. You get this information from the output of the `gear.list` command.

Creating Credentials

You can create credentials to use for access to managed assets through the Oracle Enterprise Manager Ops Center's command line.

Use one of the following protocol-specific subcommands to create credentials:

- `create_chap -n|--name` *`credentialname`* `-d|--description` *`text`* `-u|--username` *`username`* `-p|--passwordfile` *`filename`*

- `create_cisco -n|--name credentialname -d|--description text -u|--username username -p|--passwordfile filename`
- `create_http -n|--name credentialname -d|--description text -u|--username username -p|--passwordfile filename`
- `create_ipmi -n|--name credentialname -d|--description text -u|--username username -p|--passwordfile filename`
- `create_jmx -n|--name credentialname -d|--description text -u|--username username -p|--passwordfile filename`
- `create_ovm_sparc -n|--name credentialname -d|--description text -u|--username username -p|--passwordfile filename`
- `create_serial_console -n|--name credentialname -d|--description text -u|--username username -p|--passwordfile filename`
- `create_snmp -n|--name credentialname -d|--description text -u|--username username -p|--passwordfile filename`
- `create_snmp_v3 -n <name> [-d <description>] -u <user_name> -p <password_file> --authprotocol <MD5/SHA> --privprotocol <DES/AES>`
- `create_ssh -n|--name credentialname -d|--description text -u|--username username -e|--privesc none|role|sudo -r|--roleOrSudo username -o|--port portnumber -p|--passwordfile filename`
- `create_storage -n|--name credentialname -d|--description text -u|--username username -r|--restport portnumber -o|--port portnumber -p|--passwordfile filename`
- `create_telnet -n|--name credentialname -d|--description text -u|--username username -p|--passwordfile filename`
- `create_wmi -n|--name credentialname -d|--description text -u|--username usernamee -p|--passwordfile filename`

Deploy-Setup

You can direct deployments through the Oracle Enterprise Manager Ops Center's command line.

Use Deploy-setup mode to specify a deployment plan and its target. The deployment plan must exist already and the asset must be already a managed asset.

Starting Deploy-Setup Mode

You can perform deploy operations through the Oracle Enterprise Manager Ops Center's command line.

To run commands that deploy assets, enter the Deploy mode, which redirects you to the Deploy-Setup mode.

- Enter `deploy` in the CLI prompt.

```
localhost > deploy
localhost/deploy-setup >
```

Selecting a Deployment Plan

You can choose a deployment plan through the Oracle Enterprise Manager Ops Center's command line.

You must select an existing deployment plan.

- Enter `plan <plan name>`

  Use the `-v| --version` option to specify a version of a plan.

```
localhost/deploy-setup > plan plan-fwp
Plan "plan-fwp" selected: version 1, description "None"
```

Selecting a Target Asset

You can choose an asset to be a target of a plan through the Oracle Enterprise Manager Ops Center's command line.

You must identify the asset that are the target of the deployment plan. If multiple assets have the same user-friendly name, you are prompted to select the asset's UUID.

- Enter `target <asset name or public UUID>`

  You can also add some other options:

  Use the `-a| --add` option to add assets to current set of targets.

  Use the `-d| --delete` option to delete assets from the current set of targets.

  Use the `-g| --gear <asset name>` option to give an asset name or a list of asset names, separated by comma.

  Use the `-U| --UUID <public UUID>` option to give an asset UUID or a list of asset UUIDs, separated by comma.

  Example using an asset's name:

```
localhost/deploy-setup > target foo.example.com
```

  Example using an asset public UUID:

```
localhost/deploy-setup > target 53f6e87f-3582-4cda-9c63-9121a3a8beb3
```

After you specify the plan and target, the mode changes from the deploy-setup mode to the deploy mode. This is reflected at the command prompt as follows:

```
localhost/deploy>
```

Deploy

You can perform deployments through the Oracle Enterprise Manager Ops Center's command line.

Use Deploy mode to direct deployment plans.

Note:

Examples of Plan Deployment can be found on the Enterprise Controller in /opt/SUNWoccli/doc/examples.

Viewing the Plan

You can view the attributes of the deployment plan or the deployment plan through the Oracle Enterprise Manager Ops Center's command line.

- Enter `show plan`.

```
localhost/deploy > show plan
Target: foo.example.com

_____________________________________________________

Step: Update Firmware

_____________________________________________________

Associated Profile:
{
firmwarePackages:
[
ILOM-3_0_3_31_a-Sun_Fire_X4600M2
]
dryRun: False
subType: Server
resetSP: False
profileDescription:
forceDowngrade: False
forceReinstall: False
profileName: fwp-profile
network: None
ip: None

}
```

To view the structure of a plan:

- Enter `show`.

```
localhost/deploy > show
Step: Update Firmware

_____________________________________________________

{
isDryRun: Dry run?
type: boolean

firmwarePackages: Firmware Packages
type: array of [
type:java.lang.String
]

resetSP: Reset SP?
type: boolean

forceDowngrade: Force Downgrade?
type: boolean

forceReinstall: Force Reinstall?
type: boolean

ip: IP Address
type: java.lang.String

network: Network Information
{
gateway: Gateway IP Address
```

```
type: java.lang.String

objectName: Object Name
type: java.lang.String

userFriendlyName: User Friendly Name
type: java.lang.String

netmask: Network Address Mask
type: java.lang.String

ip: IP Address
type: java.lang.String

}
}
```

To view the results of a deployment plan:

- Enter `show results`.

  Example:

```
localhost/deploy > show results
Step: Provision OS
Operating-System-1
```

Setting the Attributes of a Deployment Plan

You can modify the value of the attributes of a deployment plan through the Oracle Enterprise Manager Ops Center's command line.

Some deployment plans require specific information during the deployment. See Table 1-5 for the names of the attributes you must set before applying the plan.

Table 1-5 Deployment Plans and Attributes

Deployment Plan	Attributes
Configure M-Series Hardware, Create and Install Domain	No per-target attribute collection required.
Configure RAID	No per-target attribute collection required.
Configure Server Hardware and Install OS	No per-target attribute collection required.
Configure Service Processor	No per-target attribute collection required.
Configure and Install Dynamic System Domain	No per-target attribute collection required.
Configure and Install Logical Domains	No per-target attribute collection required.
Configure and Install Virtual Machines	No per-target attribute collection required.
Create Boot Environment	No per-target attribute collection required.
Create Dynamic System Domain	No per-target attribute collection required.

Table 1-5 (Cont.) Deployment Plans and Attributes

Deployment Plan	Attributes
Create Logical Domains	`guestName`: name of the new logical domain. This is just the name of the virtual server guest. (Optional) `prime`: set to `true` to set the resource plan data so that the already set profile data on the logical domain step are used to prime the resource data. Logical domains creation requires the setting of resource plan structures per each logical domain to create.
Create Solaris Zones	`ipAddress`: IP for the new zone, if mode is static. `ipMode`: IP address assignment mode. Value = `static` or `dynamic`. `ifName`: network interface name to identify NIC to assign to zone. `hostName`: host name of the new zone. (Optional) `prime`: set to `true` to set the resource plan data so that the already set profile data on the zone step are used to prime the resource data. Solaris zones creation requires the setting of resource plan structures per each logical domain zone to create.
Configure and Install Solaris Zones	The only parameters that must be set are the same as those used in creating an Oracle Solaris zones deployment plan.
Create Virtual Machines	No per-target attribute collection required.
Provision Network	No per-target attribute collection required.
Provision OS	`ip`: set this attribute if networking option selected in the OS provision profile was `None` or `Link Aggregation`. `dataIp`: set this attribute if networking option selected in the OS provision profile was `IPMP`.
Install Server	The only parameters that must be set are the same than in provision OS.
Software Deployment / Update	No per-target attribute collection required.
Update Solaris 11 OS	No per-target attribute collection required.
Update BIOS Configuration	No per-target attribute collection required.
Update Firmware	No per-target attribute collection required.
Update Firmware and Install Oracle VM Server for SPARC	No per-target attribute collection required.

Use the following syntax to set an attribute or list of attributes of a deployment plan:

- For simple types:

  Enter `set "<attribute-name> = <'string-value'>"|<int>|<true|false>`

  Examples:

```
localhost/deploy > set "forceReinstall = false"
localhost/deploy > set "ip = '192.0.2.23'"
```

- For attributes that are backed by other struct-like value objects, use the following syntax:

  Enter `set "<attribute-name> = list or nested object"`

  ```
  set "network={gateway='192.0.2.111', userFriendlyName='ip address',
  ip='192.0.2.4'}"
  ```

- If you use JavaScript Objet Notation (JSON) format, use the following syntax:

  ```
  set "{'resourcePlans':[{'hostName':'myhostname','networks':[{'networkBindings':
  [{'ipAddress':'192.0.2.1'}]}]}]}"
  ```

  Or

  ```
  set
  "resourcePlans=[{hostName='myhostname',networks=[{networkBindings=[{ipAddress='192
  .0.2.1'}]}]}]"
  ```

  Or

  ```
  set "<json-string> "
  ```

- For deployment plans on multiple targets that require unique values for each target, use the `set` command as follows:

  ```
  localhost/deploy > set "@<target-uuid or dynamic-target>:<key>=<'string-value'>"|
  <int>|<true|false>|list of nested objects"
  set "<@target-uuid or dynamic-target>:<json-string>"
  ```

  Example:

  ```
  localhost/deploy > set @<target-UUID>:"network={gateway='192.0.2.1',
  userFriendlyName='ip address', ip='192.0.2.4'}"
  ```

Adding Attributes to a Deployment Plan

You can add attributes to a deployment plan through the Oracle Enterprise Manager Ops Center's command line.

The syntax for adding attributes is similar to the syntax for setting attributes. However, for arrays, the `add` command appends an element to the array while the `set` command modifies the attribute of an existing element within the array.

Use the following syntax to add attributes to a deployment plan:

- For simple types:

  Enter `add "<attribute-name> = {<'string-value'>"|<int>|<true|false>}`

  Examples:

  ```
  localhost/deploy > add "forceReinstall = false"
  localhost/deploy > add "ip = '192.0.2.23'"
  ```

- For attributes that are backed by other struct-like value objects, use the following syntax:

  Enter `add "<attribute-name> = list or nested object"`

```
localhost/deploy > add "network={gateway='192.0.2.1', userFriendlyName='ip
address', ip='192.0.2.4'}"
```

- If you use JavaScript Objet Notation (JSON) format, use the following syntax:

  ```
  "{'resourcePlans':[{'hostName':'myhostname','networks':[{'networkBindings':
  [{'ipAddress':'192.0.2.1'}]}]}]}"
  ```

  Or

  ```
  add
  "resourcePlans=[{hostName='myhostname',networks=[{networkBindings=[{ipAddress='192
  .0.2.1'}]}]}]"
  ```

  Or

  ```
  add "<json-string> "
  ```

- For deployment plans on multiple targets that require unique values for each target, use the `set` command as follows:

  ```
  add "@<target-uuid or dynamic-target>:<key>=<'string-value'>"|<int>|<true|false>|
  list of nested objects"
  add "<@target-uuid or dynamic-target>:<json-string>"
  ```

  Example:

  ```
  localhost/deploy > add @<target-UUID>:"network={gateway='192.0.2.1',
  userFriendlyName='ip address', ip='192.0.2.2'}"
  ```

Testing a Deployment Plan

You can test a new development plan using the Oracle Enterprise Manager Ops Center's command line.

To test a deployment plan, use the `dryrun` command to create the tasks without committing the job, this ensures no errors with data.

To dry run a deployment plan:

- Enter `dryrun`.

  ```
  localhost/deploy > dryrun
  ```

Applying a Deployment Plan

You can apply a deployment plan to an asset through the Oracle Enterprise Manager Ops Center's command line.

To execute a deployment plan, set the attributes if required and then apply the plan. Some deployment plans need to have their attributes set before applying the plan.

- Enter `apply`.

  ```
  localhost/deploy > apply
  ```

Discover

You can discover assets through the Oracle Enterprise Manager Ops Center's command line.

Use Discover mode to set up and run discovery jobs. You can create a discovery job or use a discovery profile to discover an asset. You can also execute an existing discovery profile.

Starting Discover Mode

You can discover assets through the Oracle Enterprise Manager Ops Center's command line.

- Enter `discover` in the CLI prompt.

```
localhost > discover
localhost/discover >
```

Creating a Discovery Job

Discover assets through the Oracle Enterprise Manager Ops Center's command line.

The create submode is used to create and launch new discovery jobs. This submode has its own set of commands.

1. Enter `create`.

```
localhost/discover > create
localhost/discover/create >
```

2. Set the type of discovery job, for example, OS, ILOM, ALOM.

Discovering an OS

You can discover an operating system through the Oracle Enterprise Manager Ops Center's command line.

1. Enter `set type=os`.
2. Enter the discovery credentials.
   - Enter `set ssh_user=<user>` to set the login user name.
   - Enter `set ssh_password=<password>` to set the login password.
   - (Optional) If the login user name is not the root user, enter `set ssh_root_user=<root user>` to set the root user name.
   - (Optional) If the login user name is not the root user, enter `set ssh_root_password=<root password>` to set the root password.
3. Enter `set ipaddrs=<IP address or addresses>` to specify the target IP address or addresses. The following formats can be used:
   - A single IP address.
   - A comma-separated list of IP addresses enclosed in parentheses. Example: (192.0.2.1, 192.0.2.2).
   - An IP range in Classless Inter-Domain Routing (CIDR) subnet notation. Example: 192.0.2.1/24.
   - An IP range in hyphen notation. Example: 192.0.2.1 - 192.0.2.10.
4. (Optional) Enter `set ssh_port=<port>` to specify a port.
5. (Optional) Enter `set use_default=true|false` to specify if the factory default credentials are used or not for the discovery job.

6. (Optional) Enter the `show` command to display all discovery information. If necessary, use the `unset <parameter>` command to unset a discovery parameter or `clear` to reset and revert to default values all configuration data.

7. Enter `commit` to start the configured discovery job.

   The job is launched, and the job ID is displayed.

   Example of OS discovery:

```
localhost/discover > create
localhost/discover/create > set type=os
localhost/discover/create > set ssh_user=sysmgmt
localhost/discover/create > set ssh_password=l0ckit
localhost/discover/create > set ipaddrs=192.0.2.202
localhost/discover/create > show
discovery type: Solaris,Linux OS
use_default=False
ipaddrs=192.0.2.202
ssh_user=sysmgmt
ssh_password=l0ckit
ssh_root_user=
ssh_root_password=
ssh_port=
localhost/discover/create > commit
```

Discovering an ILOM Service Processor

You can discover the service processor and its operating system through the Oracle Enterprise Manager Ops Center's command line.

ILOM is the service processor used in some Oracle Sun servers. An ILOM discovery also discovers operating systems.

1. Enter `set type=ilom`.

2. Enter the discovery credentials.

   - Enter `set ssh_user=<user>` to set the login user name.
   - Enter `set ssh_password=<password>` to set the login password.
   - (Optional) If the login user name is not the root user, enter `set ssh_root_user=<root user>` to set the root user name.
   - (Optional) If the login user name is not the root user, enter `set ssh_root_password=<root password>` to set the root password.

3. Enter `set ipaddrs=<IP address or addresses>` to specify the target IP address or addresses. The following formats can be used:

   - A single IP address.
   - A comma-separated list of IP addresses enclosed in parentheses. Example: (192.0.2.1, 192.0.2.2).
   - An IP range in CIDR subnet notation. Example: 192.0.2.1/24.
   - An IP range in hyphen notation. Example: 192.0.2.1 - 192.0.2.10.

4. Enter `set ipmi_user=<IPMI user name>`.

5. Enter `set ipmi_password=<IPMI user password>`.
6. (Optional) Enter the `show` command to display all discovery information. If necessary, use the `unset <parameter>` command to unset a discovery parameter or `clear` to reset and revert to default values all configuration data.
7. Enter `commit` to start the configured discovery job.

   The job is launched, and the job ID is displayed.

Discovering an ALOM Service Processor

You can discover a service processor and its operating system through the Oracle Enterprise Manager Ops Center's command line.

ALOM is the service processor used in some Oracle Sun servers. An ALOM discovery also discovers operating systems and systems with ILOM service processors.

1. Enter `set type=alom`.
2. Enter the discovery credentials.
   - Enter `set ssh_user=<user>` to set the login user name.
   - Enter `set ssh_password=<password>` to set the login password.
   - (Optional) If the login user name is not the root user, enter `set ssh_root_user=<root user>` to set the root user name.
   - (Optional) If the login user name is not the root user, enter `set ssh_root_password=<root password>` to set the root password.
3. Enter `set ipaddrs=<IP address or addresses>` to specify the target IP address or addresses. The following formats can be used:
   - A single IP address.
   - A comma-separated list of IP addresses enclosed in parentheses. Example: (192.0.2.1, 192.0.2.2).
   - An IP range in CIDR subnet notation. Example: 192.0.2.0/24.
   - An IP range in hyphen notation. Example: 192.0.2.1 - 192.0.2.2.
4. Enter `set telnet_user=<telnet user name>`.
5. Enter `set telnet_password=<password for telnet user name>`.
6. (Optional) Enter the `show` command to display all discovery information. If necessary, use the `unset <parameter>` command to unset a discovery parameter or `clear` to reset and revert to default values all configuration data.
7. Enter `commit` to start the configured discovery job.

   The job is launched, and the job ID is displayed.

Viewing Discovery Profiles

You can list all discovery profiles through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list_profiles`.

  Use the `-i| --ids < profile IDs>` option to give a specific discovery profile ID or a list of discovery profile IDs. IDs must be separated by a comma.

Viewing Discovery Ranges

You can list all the existing discovery ranges that discover systems through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list_ranges`.

  Use the `-i| --ids <range IDs>` option to give a specific discovery range ID or a list of discovery ranges IDs. IDs must be separated by a comma.

Viewing Driver Credentials

You can list all driver credentials used to discover systems through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list_credentials`.

  Use the `-i| --ids <credential IDs>` option to give a specific driver credential ID or a list of driver credentials IDs. IDs must be separated by a comma.

Viewing Discovery Profile Credentials

You can list all driver credentials for a discovery profile through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list_profile_credentials -i| --id <discovery profile iD>`.

Viewing Discovery Ranges

You can list the IP ranges specified in a discovery profile through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list_profile_ranges -i| --id <discovery profile iD>`.

Viewing Networks

You can list all networks available to discover systems through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list_networks`.

Executing Discovery Profiles

You can execute a profile to discover assets that comply with the profile through the Oracle Enterprise Manager Ops Center's command line.

- Enter `execute -i| --id <discovery profile id> -t| --targets <target friendly names>`.

  Use `-i| --id <ID>` to execute the discovery profile with ID `<ID>`.

Use `-t| --targets <target friendly names>` to give a list of target friendly names. Target names must be separated by a comma.

Use the `-n| --networkuuid <network UUID>` option to give a network UUID.

Use the `-c| --credentials <discovery credentials IDs>` option to give a specific discovery credential ID or a list of discovery credential IDs. IDs must be separated by a comma.

Use the `-m| --management <management credential ID>` option to give a management credential ID.

Use the `-p| --proxy <proxyID>` option to direct the discovery to targets managed by the specified Proxy Controller. Requires the `-r| --range` option.

Use the `-s| --serviceTag <servicetag credential ID>` option to give a service tag credential ID.

Use the `-a| --agentLess` option to set agentless deployment on.

Use the `-r| --ranges <discovery ranges IDs>` option to give a list of discovery ranges IDs. IDs must be separated by a comma.

FWImage

You can perform operations on firmware images through the Oracle Enterprise Manager Ops Center's command line.

Use Fwimage mode to view and delete firmware images.

Starting Fwimage Mode

You can perform operations on firmware images through the Oracle Enterprise Manager Ops Center's command line.

- Enter `fwimage` in the CLI prompt.

```
localhost > fwimage
localhost/fwimage >
```

Viewing Firmware Images

You can view a list of available firmware images through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list`.

  Use the `-l| --detail` option to display a detailed list.

Creating a Firmware Image

You can create a firmware image through the Oracle Enterprise Manager Ops Center's command line.

1. Enter `create`.

   The image creation submode is launched.

2. Enter `add_device -v | --vendor <vendor> -m| --model <model>` to add a device for the firmware image.

   Use the `-v| --validated` option to specify a validated image.

3. Enter the criteria for the image using the `set` command.
   - Enter `set name=<name>` to set the firmware image name.
   - Enter `set version=<version>` to set the firmware version.
   - Enter `set type=<type>`.
   - Enter `set make=<make>`.
   - (Optional) Enter `set description=<description>`.
   - (Optional) Enter `set size=<size>`.
   - (Optional) Enter `set powerOffRequired=<True|False>`. This criteria is set to `False` by default.
   - (Optional) Enter `set dependeeFirmwarePackageName=<dependencies>`. This criteria is set to `None` by default.
   - (Optional) Enter `set updateCount=<update count>`.
4. (Optional) Use the `show` command to show the current criteria. If necessary, use the `unset <property>` command to unset a property, or use the `reset` command to clear all criteria.
5. Enter `commit` to create the new image using your criteria.

Updating a Firmware Image

You can update an existing firmware image through the Oracle Enterprise Manager Ops Center's command line.

1. Enter `update -i| --image <image name>`.

   The image update submode is launched.
2. Enter the new criteria for the image using the `set` command.
   - Enter `set version=<version>` to set the firmware version.
   - Enter `set type=<type>` to set the firmware type.
3. Enter `commit` to update the firmware image.

```
localhost/fwimage > update -i myimage
localhost/fwimage/update > set version=1.1
localhost/fwimage/update > set type=ALOM-CMT
localhost/fwimage/update > commit
Firmware image updated successfully
```

Deleting a Firmware Image

You can delete any firmware image through the Oracle Enterprise Manager Ops Center's command line.

- Enter `delete -i| --image <firmware image name>`.

  The firmware image is deleted.

FWProfile

You can perform operations on firmware profiles through the Oracle Enterprise Manager Ops Center's command line.

Use Fwprofile mode to view and delete firmware profiles.

Starting Fwprofile Mode

You can perform operations on firmware profiles through the Oracle Enterprise Manager Ops Center's command line.

- Enter `fwprofile` in the CLI prompt.

```
localhost > fwprofile
localhost/fwprofile >
```

Viewing Firmware Profiles

You can view the existing firmware profiles through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list`.

  Use the `-l| --detail` option to display a detailed list.

  A list of firmware profiles is displayed.

Checking the Status of a Firmware Profile

You can check the status of a firmware profile through the Oracle Enterprise Manager Ops Center's command line.

- Enter `status -p| --profile <profile name>`.

  The firmware profile status is displayed.

Creating a Firmware Profile

You can create a firmware profile using one or more firmware images through the Oracle Enterprise Manager Ops Center's command line.

- Enter `create -p| --profile <firmware profile name> -i| --images <list of images separated by comma>`.

  Use the `-d| --description <description>` option to add a description to the profile.

  Use the `-r| --reinstall` option to force a reinstall when provisioning the firmware.

  Use the `-g| --downgrade` option to force a downgrade when provisioning the firmware.

  The firmware profile is created.

Updating a Firmware Profile

You can update an existing firmware profile through the Oracle Enterprise Manager Ops Center's command line.

- Enter `update -p| --profile <firmware profile name> -i | --images <list of images separated by comma>`.

Use the `-d| --description <description>` option to add a description to the profile.

Use the `-r| --reinstall` option to force a reinstall when provisioning the firmware.

Use the `-g| --downgrade` option to force a downgrade when provisioning the firmware.

The firmware profile is updated.

Deleting a Firmware Profile

You can delete a firmware profile through the Oracle Enterprise Manager Ops Center's command line.

- Enter `delete -p| --profile <firmware profile name>`.

  The firmware profile is deleted.

Gear

The gear mode manages assets through the Oracle Enterprise Manager Ops Center's command line.

Use gear mode to view and manage all assets, including operating systems, hardware, and chassis. Although the term for objects that the Enterprise Manager Ops Center software manages is *asset*, the CLI uses the term *gear*.

Starting Gear Mode

You can perform operations on managed assets through the Oracle Enterprise Manager Ops Center's command line.

- Enter `gear` in the CLI prompt.

```
localhost > gear
localhost/gear >
```

Viewing Assets

You can list the assets managed by Oracle Enterprise Manager Ops Center through its command line.

- Enter `list`. The list of assets is filtered by the roles assigned to the user account.

```
localhost/gear > list
Registered Gear:


UFN |Manage state|Description |Asset Type|         UUID         |  Maintenance|
-------------------------------------------------------------------------------
v64v|   MANAGED  |192.0.2.14 |  Server  |abcde-fc-8b-91-abcd51d|NO_MAINTENANCE
c4pr|   MANAGED  |192.0.2.26 |  Server  |abcde-dc-43-82-abcd86d|NO_MAINTENANCE
```

Use the `-l| --detail` option to show asset details.

Example

```
localhost/gear > list -l -d
Registered Gear:
-------------------------------------------------------------------------------
```

```
Name : v64v
  Description : 192.0.2.14
  Managed State : MANAGED
  Status : OK
  Lock Info : None
  Is a Zone : False
  Public UUID : abcde-fc-8b-91-dd2651d
  Asset Type : Server
  IPs which were used to discover gear : 192.168.10.10
Name : c4pr
  Description : 192.0.2.26
  Managed State : MANAGED
  Status : OK
  Lock Info : None
  Is a Zone : False
  Public UUID : 5a544-dc-43-82-ef8886d
  Asset Type : Server
  IPs which were used to discover gear : 192.168.10.10
```

Use the `f| --filter <filter term>` option to filter the assets list.

Example

```
localhost/gear > list --filter v64v
Registered Gear:
  UFN    |  Manage state | Description | Asset Type |
UUID
------------------------------------------------------------------------------
    v64v    |    MANAGED    | 192.0.2.14  |  Server    |     6fdg9-fc-8b-91-dd2651
```

Updating Asset Information

You can update the name of any asset, including the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

You can also update an asset's description and associated tags.

- Enter `update -g| --gear <asset name>`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when several assets have the same name.

  Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when several assets have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

  Examples:

  ```
  --attributes=ip=192.0.2.1,type='server'

  --attributes=type='server',UFN='foo'
  ```

  Use the `-n| --name <new name>` option to give the asset a new name.

  Use the `-d| --description <description>` option to update the asset's description.

  Use the `-t| --tags <space-separated list of tags>` option to update the asset's legacy tags.

Use the `-s| --semantictags <space-separated list of tags>` option to update the asset's semantic tags.

Viewing Jobs Associated With Assets

You can view current and historical jobs associated with an OS, server, or chassis through the Oracle Enterprise Manager Ops Center's command line.

- Enter `show_jobs -g| --gear <asset name>`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when several assets have the same name.

  Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when several assets have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

  Examples:

  ```
  --attributes=ip=192.0.2.1,type='server'

  --attributes=type='server',UFN='foo'
  ```

Managing an Asset

You can manage discovered assets through the Oracle Enterprise Manager Ops Center's command line.

- Enter `manage -g| --gear <asset name> -u| --user <user name with access to asset> -p| --password <user's password>`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when several assets have the same name.

  Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when several assets have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

  Examples:

  ```
  --attributes=ip=192.0.2.1,type='server'

  --attributes=type='server',UFN='foo'
  ```

  Use the `-t| --type <type>` option to give the asset type. This is useful when several assets have the same name.

Unmanaging an Asset

You can unmanage a managed asset, removing the asset from the managed asset list and removing any agent through the Oracle Enterprise Manager Ops Center's command line.

- Enter `unmanage -g| --gear <asset name> -u| --user <user name with access to asset> -p| --password <user's password>`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when several assets have the same name.

Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when several assets have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

Examples:

```
--attributes=ip=192.0.2.1,type='server'

--attributes=type='server',UFN='foo'
```

Use the `-t| --type <type>` option to give the asset type. This is useful when several assets have the same name.

Setting the Maintenance Mode of an Asset

You can place an asset in maintenance mode or remove an asset from maintenance mode through the Oracle Enterprise Manager Ops Center's command line.

- Enter `set_maintenance -g| --gear <asset name> on|`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when several assets have the same name.

  Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when several assets have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

  Examples:

  ```
  --attributes=ip=192.0.2.1,type='server'

  --attributes=type='server',UFN='foo'
  ```

  Use the `on` option to place the asset in maintenance mode.

  Use the `off` option to remove the asset from maintenance mode.

Deleting an Asset

You can delete assets through the Oracle Enterprise Manager Ops Center's command line.

- Enter `delete -g| --gear <asset name>`

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when several assets have the same name.

  Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when several assets have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

  Examples:

  ```
  --attributes=ip=192.0.2.1,type='server'

  --attributes=type='server',UFN='foo'
  ```

Use the `-f| --force` option to force the operation.

Reinstalling an Agent Controller on an Operating System

You can reinstall an agent on one or more managed operating systems through the Oracle Enterprise Manager Ops Center's command line.

- Enter `reinstall_agent -g| --gear <comma-separated asset list> -v| --version <Agent version to install> -u| --user <user name> -p| --password <password>`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when assets might have the same name.

  Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when assets might have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

  Examples:

  ```
  --attributes=ip=192.0.2.1,type='server'

  --attributes=type='server',UFN='foo'
  ```

Rebooting an Operating System

You can reboot a managed operating system through the Oracle Enterprise Manager Ops Center's command line.

- Enter `reboot -g| --gear <OS asset name>`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when assets might have the same name.

  Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when assets might have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

  Examples:

  ```
  --attributes=ip=192.0.2.1,type='server'

  --attributes=type='server',UFN='foo'
  ```

Updating Firmware

You can update firmware on one or more systems using an existing firmware profile through the Oracle Enterprise Manager Ops Center's command line.

- Enter `apply_firmware -g| --gear <comma-separated asset list> -p| --profile <firmware profile>`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when assets might have the same name.

  Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when assets might have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`.

Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

Examples:

```
--attributes=ip=192.0.2.1,type='server'

--attributes=type='server',UFN='foo'
```

Checking Firmware Compliance

You can compare the firmware for a list of assets to a firmware profile through the Oracle Enterprise Manager Ops Center's command line.

- Enter `fwprofile_compliance -g| --gear <comma-separated asset list> -p| --profile <firmware profile>`.

Provisioning an OS

You can provision a new operating system onto a managed system through the Oracle Enterprise Manager Ops Center's command line.

The `provision_os` command starts a submode with its own set of subcommands.

1. Enter `provision_os -g| --gear <asset name> -p| --profile <profile>`.

   ```
   localhost/gear > provision_os -g targetsystem -p S10
   localhost/gear/provision_os# >
   ```

2. Use the `set` command to set the provisioning properties. The properties are:

   - `profile` – The OS profile to use for the provisioning job. Required.
   - `register` – Specifies whether the new OS will be registered. Values are `true` or `false`.
   - `manualnetboot` – Values are `true` or `false`.
   - `system_type` – The OS that is provisioned. Values are `redhat`, `suse` or `solaris`.
   - `server_name` – The name of the target system. Required.
   - `hostname` – The new host name. Required.
   - `domain`
   - `netmask`
   - `gateway`
   - `nameserver`
   - `ip_address` – The IP address for the OS. Required.
   - `boot_path`
   - `boot_device`
   - `console_baud`

- `console`

3. (Optional) Use the `show` command to show the values of all provisioning properties. If necessary, use the `unset <property>` command to unset a property or the `reset` command to reset all properties.
4. Use the `commit` command to launch the OS provisioning job.

Changing Locator Lights

You can activate or deactivate lights on a physical asset through the Oracle Enterprise Manager Ops Center's command line.

- Enter `set -g| --gear <asset name> -l| --locator <on|off>`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when assets might have the same name.

  Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when assets might have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

  Examples:

  ```
  --attributes=ip=192.0.2.1,type='server'

  --attributes=type='server',UFN='foo'
  ```

Enabling or Disabling Notifications

You can enable or disable notifications for a specific OS, server, or chassis through the Oracle Enterprise Manager Ops Center's command line.

- Enter `set -g| --gear <asset name> -n| --notifications <on|off>`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when assets might have the same name.

  Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when assets might have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

  Examples:

  ```
  --attributes=ip=192.0.2.1,type='server'

  --attributes=type='server',UFN='foo'
  ```

Powering Off a Server or Chassis

You can deactivate a server or a chassis through the Oracle Enterprise Manager Ops Center's command line.

- Enter `poweroff -g| --gear <asset name>`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when assets might have the same name.

Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when assets might have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

Examples:

```
--attributes=ip=192.0.2.1,type='server'

--attributes=type='server',UFN='foo'
```

Use the `-f| --force` option to force the server or chassis to power off.

Powering On a Server or Chassis

You can activate a server or a chassis through the Oracle Enterprise Manager Ops Center's command line.

- Enter `poweron -g| --gear <asset name>`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when assets might have the same name.

  Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when assets might have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

  Examples:

  ```
  --attributes=ip=192.0.2.1,type='server'

  --attributes=type='server',UFN='foo'
  ```

Resetting a Server or Chassis

You can reset a managed server or chassis through the Oracle Enterprise Manager Ops Center's command line.

- Enter `reset -g| --gear <server or chassis name>`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when assets might have the same name.

  Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when assets might have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

  Examples:

  ```
  --attributes=ip=192.0.2.1,type='server'

  --attributes=type='server',UFN='foo'
  ```

  Use `-n| --netboot` to cause each server to do a netboot instead of booting from disk.

  Use the `-f| --force` option to force the server or chassis to power off.

Resetting the Service Processor

You can power off a service processor and then power it on through the Oracle Enterprise Manager Ops Center's command line.

The `-r|--refresh` option also re-probes the service processor, including scanning the service tag.

- Enter `resetsp -g|--gear` *`assetname`* `[-U|--UUID` *`assetuuid`*`] [--attributes=`*`attributelist`*`] [-r|--refresh]`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when assets might have the same name.

  Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when assets might have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

  Examples:

  ```
  --attributes=ip=192.0.2.1,type='server'

  --attributes=type='server',UFN='foo'
  ```

Refreshing a Server

You can refresh the data for a server through the Oracle Enterprise Manager Ops Center's command line.

- Enter `refresh -g| --gear <server name>`.

  Use the `-U| --UUID <UUID>` option to give the asset public UUID instead of the asset name. This is useful when assets might have the same name.

  Use the `--attributes <attribute list>` option to give a list of asset attributes instead of the asset name. This is useful when assets might have the same name. The asset attributes that can be used are the `type`, `UUID`, `UFN`, and `ip`. Attributes must be separated by a comma. The `type` attribute must be `os`, `server` or `chassis`, and the `ip` attribute must be a valid IPv4 address.

  Examples:

  ```
  --attributes=ip=192.0.2.1,type='server'

  --attributes=type='server',UFN='foo'
  ```

Upgrading the Agent on Assets

You can upgrade the Agent Controller on one or more assets through the Oracle Enterprise Manager Ops Center's command line.

Upgrading the Agent Controller on an Asset

Enter `upgrade_agent [-g|--gear` *`assetname`* `|[-U|--UUID` *`assetuuid`* `| [--attributes=`*`attributelist`*`]` to upgrade the agent controller on the specified asset. You can specify the asset by name, by UUID, or by matching the specified attributes. Be sure that all the members of a hierarchy are upgraded. For example, if you upgrade a non-global zone, make sure that the agent on its parent global zone is upgraded first.

Upgrading the Agent Controller on All Assets

Enter `upgrade_all_agents [-n|--nb_jobs jobnumber] [-s|--simulate]` to identify all assets that need to be upgraded and submit a job for each operation. You can limit the number of jobs that run simultaneously. You can simulate the operation of this command before you use it. This command follows the hierarchy of assets so, for example, a global zone is upgraded before any of its non-global zones and, if an upgrade of a global zone fails, none of its non-global zone are upgraded. At the end of the operation, any asset that could not be upgraded is listed.

Groups

You can perform operations on groups through the Oracle Enterprise Manager Ops Center's command line.

Use Groups mode to view and manage groups.

Starting Groups Mode

You can perform operations on groups of assets through the Oracle Enterprise Manager Ops Center's command line.

- Enter `groups` in the CLI prompt.

```
localhost > groups
localhost/groups >
```

Viewing Groups

You can view the list of groups through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list`.

  Use the `-l| --detail` option to view a list showing group details.

  Use the `-b| --brief` option to limit the output to group names.

Viewing Members of a Group

You can view the assets that are members of a group through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list_members -g| --group <group name>.`

Viewing Group Memberships

You can view the groups to which an asset belongs through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list_membership -n| --gear <asset name>.`

  Use the `-U| --uuid <UUID>` option to give the asset public UUID instead of the asset name. This is useful when assets might have the same name.

Creating a Group

You can create a group through the Oracle Enterprise Manager Ops Center's command line.

- Enter `create -g| --group <group> -d| --description <description> -p| --parent <parent group>`.

The parent group must already exist.

Updating Group Attributes

You can change the name, description, and parent group of a group through the Oracle Enterprise Manager Ops Center's command line.

- Enter `update -g| --group <group>`.

  Use the `-n| --name <new name>` option to rename the group.

  Use the `-d| --description <new description>` option to give the group a new description.

  Use the `-p| --parent <new description>` option to give the group a new parent group.

Adding an Asset to a Group

You can add an asset to a group through the Oracle Enterprise Manager Ops Center's command line.

- Enter `attach -n| --gear <asset name> -g| --group <group>`.

  Use the `-U| --uuid <UUID>` option to give the asset public UUID instead of the asset name. This is useful when several assets have the same name.

Removing an Asset From a Group

You can remove an asset from a group through the Oracle Enterprise Manager Ops Center's command line.

- Enter `detach -n| --gear <asset name> -g| --group <group>`.

  Use the `-U| --uuid <UUID>` option to give the asset public UUID instead of the asset name. This is useful when several assets have the same name.

Moving an Asset From One Group To Another Group

You can move an asset from one group to another group through the Oracle Enterprise Manager Ops Center's command line.

- Enter `move -n| --gear <name of gear> -f| --from_group <current group> -g| --group <destination group>`.

  Use the `-U| --uuid <UUID>` option to give the asset public UUID instead of the asset name. This is useful when several assets have the same name.

Deleting a Group

You can delete a group through the Oracle Enterprise Manager Ops Center's command line.

Deleting a group does not delete the assets within the group.

- Enter `delete -g| --group <group>`.

  Use the `-c| --child` option to indicate if sub-groups under the specified group must be also deleted.

Powering On the Assets in a Group

You can power on assets in a group through the Oracle Enterprise Manager Ops Center's command line.

- Enter `poweron -g| --group <group name>`.

  Use the `-n| --netboot` option to cause each server to do a netboot instead of booting from disk.

  Deactivated hardware within the group is powered on.

Powering Off the Assets in a Group

You can power off assets in a group through the Oracle Enterprise Manager Ops Center's command line.

- Enter `poweroff -g| --group <group name>`.

  Use the `-f | --force` option to force the hardware to power off.

  Activated hardware within the group is powered off.

Resetting Servers in a Group

You can reset servers in a group through the Oracle Enterprise Manager Ops Center's command line.

- Enter `reset -g| --group <group>`

  Use the `-f| --force` option to force the operation.

  Use the `-n| --netboot` option to cause each server to do a netboot instead of booting from disk.

Resetting the Service Processors of Servers in a Group

You can power off the service processors of servers in a group and then power them on through the Oracle Enterprise Manager Ops Center's command line.

- Enter `resetsp -g| --group <group>`

  Use the `-r| --refresh` option to also scan for tags.

Guest

You can perform operations on logical domains and non-global zones through the Oracle Enterprise Manager Ops Center's command line.

Use Guest mode to manage Oracle VM Server for SPARC logical domains and Oracle zones, including kernel zones.

Starting Guest Mode

You can perform operations on logical domains and non-global zones through the Oracle Enterprise Manager Ops Center's command line.

You must switch to guest mode to run `guest` commands.

- Enter `guest` in the CLI prompt.

```
localhost > guest
localhost/guest >
```

Viewing Information About a Guest

You can display information about a specific guest through the Oracle Enterprise Manager Ops Center's command line.

To get the UUID of a guest, use the `virtualiztion` mode's `list_guests` command.

- Enter `info` with the UUID of the specific guest.

```
EnterpriseController/guest > info -U uuid
```

Stopping, Halting, Starting, Restarting, and Shutting Down a Guest

You can manage the state of a logical domain or non-global zone through the Oracle Enterprise Manager Ops Center's command line.

The following commands control how a guest is stopped and started:

```
halt -U|--UUID uuid
restart -U|--UUID uuid
shutdown -U|--UUID uuid
start -U|--UUID uuid
```

Deleting a Guest

You can delete a guest through the Oracle Enterprise Manager Ops Center's command line.

- `EnterpriseController/guest > delete` -U *uuid*

Incidents

You can perform operations on incidents through the Oracle Enterprise Manager Ops Center's command line.

Use Incidents mode to view and manage existing incidents.

Starting Incidents Mode

You can manage incidents through the Oracle Enterprise Manager Ops Center's command line.

You must switch to incidents mode to run incidents commands.

- Enter `incidents` in the CLI prompt.

```
localhost > incidents
localhost/incidents >
```

Viewing Incidents

You can view a list of existing incidents through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list`.

  Use the `-e| --emitter` option to add to the display the name and the UUID of the asset that is generating the incident.

  Use the `-l| --detail` option to display detailed incidents information.

  Use the `-s| --state <state>` option to filter incidents by `<state>`.

Use the `-u| --user <owner>` to filter incidents by `<owner>`.

Viewing Incident Details

You can view details of the existing incidents or a specific incident through the Oracle Enterprise Manager Ops Center's command line.

- Enter `show -i| --incidents <incident ID or comma-separated incident IDs list>`.

  Use the `-l| --detail` option to display detailed incidents information.

Viewing Alerts Associated with Incidents

You can view the alerts associated with one or more incidents through the Oracle Enterprise Manager Ops Center's command line.

- Enter `show_alerts -i| --incidents <incident ID or comma-separated incident IDs list>`.

  Use the `-l| --detail` option to display detailed incidents information.

Acknowledging an Incident

You can indicate that you are investigating one or more incidents through the Oracle Enterprise Manager Ops Center's command line.

- Enter `acknowledge -i| --incidents <comma-separated incident IDs list>`

  Use the `-n| --note <note>` option to add a note.

Adding an Annotation to one or More Incidents

You can add an annotation to one or more incidents through the Oracle Enterprise Manager Ops Center's command line.

- Enter `annotate -i| --incidents <comma-sepatared incident IDs list>`

  Use the `-t| --type <annotation type>` option to specify an annotation type. Annotation types are `comment` or `suggested_action`.

  Use the `-s| --synopsis <synopsis>` option to specify an annotation synopsis.

  Use the `-n| --note <note>` option to add a note.

Assigning Incidents

You can assign one or more incidents to a user through the Oracle Enterprise Manager Ops Center's command line.

- Enter `assign -i| --incidents <comma-separated incident IDs list> -u| --user <user>`.

  Use the `-n| --note <note>` option to add a note.

Closing Incident

You can close one or more incident through the Oracle Enterprise Manager Ops Center's command line.

- Enter `close -i| --incidents <comma-separated incident IDs list>`.

Use the `-d| --disable-delay <disable delay>` option to disable the incident monitoring conditions, and reactivate the monitors after `<disable delay>` minutes.

Use the `-n| --note <note>` option to add a note.

Jobs

You can perform operations on jobs through the Oracle Enterprise Manager Ops Center's command line.

Use the jobs mode to view existing jobs.

Starting Jobs Mode

You can perform operations on jobs through the Oracle Enterprise Manager Ops Center's command line.

You must change to jobs mode to run job commands.

- Enter `jobs` in the CLI prompt.

```
localhost > jobs
localhost/jobs >
```

Viewing Jobs

You can view a list of jobs through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list`.

  The list of current and historical jobs is displayed.

```
localhost/jobs > list
Job ID               Status              Owner           Job Type
-------------------------------------------------------------------------------
amritsar.5           SUCCESS             root            UpdateGearJob
amritsar.4           SUCCESS             root            DeleteAssetJob
amritsar.3           SUCCESS             root            AgentProvisioningJob
amritsar.2           SUCCESS             root            AgentProvisioningJob
amritsar.1           PARTIALLYSUCCESSFUL  root           DeleteAssetJob
```

  Use the `-l| --detail` option to view detailed job information.

  Use the `-f| --filter <term>` option to filter the job list.

  Use the `-o| --owner <job_owner>` option to list jobs owned by job_owner.

  Use the `-s| --status <job_status>` option to list jobs with status job_status.

  Use the `-t| --type <job_type>` option to list jobs with job type job_type.

  Use the `-x| --id <job_id>` option to list jobs with job id job_id.

  Use the `-m| --matchAll` option to list jobs that match all of the criteria indicated; default is for any search criteria to match.

  Use the `-r| --runid <run ID>` option to retrieve information of a job with a specific runID.

  Use the `-C| --limit` <limit> option to limit the number of jobs returned.

  Use the `-A| --ascend` option to sort results ascending; default is descending.

Use the `-R| --onlyrunningtasks` option to exclude completed jobs; default lists all tasks.

Use the `-S| --sort <job_attribute>` option to sort results on <job_attribute>; default is to sort on job id.

Use the `-T` option to list jobs that match the case.

Use the `-L| --nologdetails` option to not include log details in detailed listing of jobs.

Starting a Job

You can run an previous job using its job ID through the Oracle Enterprise Manager Ops Center's command line.

- Enter `run -x| --id <Job ID>`.

  Use the `--simulate` option to run the job in simulation mode.

Repeating a Job on Failed Targets

You can re-run a partially successful job on its failed targets through the Oracle Enterprise Manager Ops Center's command line.

- Enter `rerun_on_failed -x| --id <Job ID>`.

Deleting a Job

You can delete some jobs through the Oracle Enterprise Manager Ops Center's command line.

Deleting a job removes the job information from Oracle Enterprise Manager Ops Center. You can only delete jobs that are stopped or completed.

- Enter `delete -x| --id <Job ID>`.

Stopping a Job

You can stop a running job through the Oracle Enterprise Manager Ops Center's command line.

Stopping a job ends progress on the job.

- Enter `stop -x| --id <Job ID>`.

  Use the `-f| --force` option to force the operation.

Monitoring

You can perform monitoring operations through the Oracle Enterprise Manager Ops Center's command line.

Use Monitoring mode to manage asset monitoring services.

Starting Monitoring Mode

You can perform operations on alerts through the Oracle Enterprise Manager Ops Center's command line.

You must switch to monitoring mode to run monitoring commands.

- Enter `monitoring` in the CLI prompt.

```
localhost > monitoring
localhost/monitoring >
```

List the Monitoring State

You can check whether an asset is being monitored through the Oracle Enterprise Manager Ops Center's command line.

You can display the enabled state for an asset's monitoring rules.

- Enter `list`.

  The enabled state is displayed with a value of true or false.

```
Parameters:
   Name   |  Value   |
----------------------
 Enabled  |   True
```

Enabling Monitoring

You can enable monitoring rules on all assets through the Oracle Enterprise Manager Ops Center's command line.

- Enter `enable`.

Disabling Monitoring

You can disable all monitoring rules on all assets through the Oracle Enterprise Manager Ops Center's command line.

- Enter `disable`.

Networks

You can perform operations on networks through the Oracle Enterprise Manager Ops Center's command line.

Use Networks mode to view the list of managed networks.

Starting Networks Mode

You can perform operations on networks through the Oracle Enterprise Manager Ops Center's command line.

You must switch to networks mode to run networks commands.

- Enter networks in the CLI prompt.

```
localhost > networks
localhost/networks >
```

Viewing the List of Managed Networks

You can view the list of managed networks through the Oracle Enterprise Manager Ops Center's command line.

- Enter list

  A simplified list of managed networks is displayed.

```
Available networks:
       Name     |       UUID            |    CIDR
```

```
-------------------------------------------------
 192.0.2.0/24.1 | 0123-4567-b730-abcdef | 192.0.2.0/24
```

Use the `-l| --detail` option to display a detailed list.

```
Available networks:
      Name      |          UUID         |     CIDR     | VLAN id | Physical |
Default GW
-------------------------------------------------------------------------------
192.0.2.0/24.1  | 0123-4567-b730-abcdef | 192.0.2.0/24 |   -1    |   True   |
192.0.2.1
```

Notifications

You can perform operations on notifications through the Oracle Enterprise Manager Ops Center's command line.

Use Notifications mode to view notifications.

Starting Notifications Mode

You can perform operatons on notifications through the Oracle Enterprise Manager Ops Center's command line.

You must switch to notifications mode to run notifications commands.

- Enter `notifications` in the CLI prompt.

```
localhost > notifications
localhost/notifications >
```

Viewing Notifications

You can view all current notifications through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list`.

  A list of notifications is displayed.

```
localhost/notifications > list
ID   Severity  Type    Message
-------------------------------------------------------------------------------
1    MEDIUM    INFO    Enterprise Controller registered with Sun. (70002)
2    MEDIUM    INFO    Proxy Controller proxyone (192.0.2.185) has b...
3    MEDIUM    INFO    Proxy Controller proxytwo (192.0.2.218) has b...
```

  Use the `-l| --detail` option to display a detailed list.

  Use the `-f| --filter <filter term>` option to filter the notifications.

  Use the `-s| --severity <severity>` option to display only notifications of given severity [`HIGH|MEDIUM|LOW`].

  Use the `-c| --count <max>` option to specify a maximum count of notifications to display.

  Use the `-u| --username <user>` option to display only notifications belonging to a user.

  Use the `-i| --notification_id <ID>` option to display notifications of a specific ID.

Use the `-r| --status <status>` option to display only notifications according to their status [READ|UNREAD]. Default is to display both.

Deleting a Notification

You can delete a notification using its ID number through the Oracle Enterprise Manager Ops Center's command line.

- Enter `delete -i| notification_id <notification ID number>`.

```
localhost > delete -i 43
Successfully deleted notification
```

Use the `-u| --username <user>` option to delete notifications belonging to a user.

OSImage

You can perform operations on operating system images through the Oracle Enterprise Manager Ops Center's command line.

Use the Osimage mode to view and manage OS images.

Starting OS Image Mode

You can perform operations on OS images through the Oracle Enterprise Manager Ops Center's command line.

You must switch to OS image mode to run OS image commands.

- Enter `osimage` in the CLI prompt.

```
localhost > osimage
localhost/osimage >
```

Viewing OS Images

You can view OS images through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list`.

  Use the `-l| --detail` option to view a detailed list.

Importing an OS Image

You can import an OS image through the Oracle Enterprise Manager Ops Center's command line.

The OS image must be located to the Enterprise Controller's local file system.

- Enter `import -f| --filename <image file name and location> -d| --description <description> -n| --name <image name>`.

```
localhost/osimage > import -f folder/location/image.iso -d Solaris 10 -n Solaris
10
JobId = EnterpriseController.47
```

Deleting an OS Image

You can delete OS images through the Oracle Enterprise Manager Ops Center's command line.

- Enter `delete -n| --name <image name>`.

OSProfile

You can perform operation on profiles that deploy operating systems through the Oracle Enterprise Manager Ops Center's command line.

Use the Osprofile mode to view, import, and export operating system profiles.

Starting OS Profile Mode

You can perform operations on profiles for operating systems through the Oracle Enterprise Manager Ops Center's command line.

You must switch to OS profile mode to run OS profile commands.

- Enter `osprofile` in the CLI prompt.

```
localhost > osprofile
localhost/osprofile >
```

Viewing OS Profiles

You can view OS profiles through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list`.

  Use the `-l| --detail` option to view a detailed list.

```
localhost/osprofile > list
 Profile Name: sles10Jeff1
   Description: sles10Jeff1
   Distro Name: sles10
   OS Version: SUSE-Linux-Enterprise-Server-SP2-10.2-0
   Platform: x86
```

Importing a JET Template

You can import a JET template through the Oracle Enterprise Manager Ops Center's command line.

- Enter `import_jet_template -p| --profile <profile name> -i| --image <OS image> -t| --template_path <local template path>`.

Importing an OS Profile

You can import an OS profile file through the Oracle Enterprise Manager Ops Center's command line.

If you are importing a profile that you have previously exported, change the `Name` and `Payload_Name` attributes before you import the profile.

- Enter `import -f| --file <profile name>`

Exporting an OS Profile

You can export an OS profile to a designated file through the Oracle Enterprise Manager Ops Center's command line.

- Enter `export -p| --profile <profile name> -f| --file <file name.prof>.`

Copying an OS Profile

You can make a new profile by copying an existing profile through the Oracle Enterprise Manager Ops Center's command line.

- Enter `clone -p| --profile <original profile name> -n| --name <new profile name>`.

Deleting an OS Profile

You can delete a profile through the Oracle Enterprise Manager Ops Center's command line.

- Enter `delete -p| --profile <profile name>`.

Plan

You can perform operations on plans through the Oracle Enterprise Manager Ops Center's command line.

Use Plan mode to view and delete deployment plans.

Starting Plan Mode

You can perform operations on deployment plans through the Oracle Enterprise Manager Ops Center's command line.

You must switch to plan mode to run plan commands.

- Enter `plan` in the CLI prompt.

```
localhost > plan
localhost/plan >
```

Viewing Plans

You can display a list of plans through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list`.

```
EnterpriseController/plan > list
ID  | Name                                                    | Description
-------------------------------------------------------------------------------
2951|Oracle Solaris 11.2 x86-11.5.0-OracleSolarisSmallServer|Created by profile
```

Deleting a Plan

You can delete a deployment plan through the Oracle Enterprise Manager Ops Center's command line.

- `EnterpriseController/plan >delete <plan_name>`.

Reports

You can perform operations on reports through the Oracle Enterprise Manager Ops Center's command line.

Use Reports mode to view the collection of samples called partitions, delete a partition, apply the rollup and cleanup processes to a partition, and rever the rollup process.

Starting Reports Mode

You can perform operations on reports through the Oracle Enterprise Manager Ops Center's command line.

You must switch to reports mode to run report commands.

- Enter `reports` in the CLI prompt.

```
localhost > reports
localhost/reports >
```

Checking the Status of the Reporting Service

You can view the current status of the reporting service through the Oracle Enterprise Manager Ops Center's command line.

- Enter `show`.

Starting the Reporting Service

You can start the reporting service without restarting the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

- Enter `start`.

Stopping the Reporting Service

You can stop the reporting service without stopping the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

- Enter `stop`.

Viewing Partitions

You can view a list of all the partitions managed by the reporting service through the Oracle Enterprise Manager Ops Center's command line.

A partition is the collection of all samples compiled during one day between 12:00 a.m. and 11:59:59 p.m.

- Enter `list`.

Viewing Detailed Partition Information

You can view detailed information about a partition through the Oracle Enterprise Manager Ops Center's command line.

You can view a partition's state, and the number of daily, hourly, weekly, monthly, or stats samples.

- Enter `partition -p| --id <partition ID>`.

Use the `-s| --state` option to display the partition's state.

Use the `-k| --hourly` option to display the number of hourly samples.

Use the `-d| --daily` option to display the number of daily samples.

Use the `-w| --weekly` option to display the number of weekly samples.

Use the `-m| --monthly` option to display the number of monthly samples.

Use the `-t| --stats` option to display the number of stats samples.

Use the `-f| --full` option to display all the information about a partition.

Viewing Assets Associated to a Partition

You can view a list of assets with at least one sample in a specific partition through the Oracle Enterprise Manager Ops Center's command line.

- Enter `urns -p| --id <partition ID>`

  Use the `-u| --urn <urn name>` option to specify the asset for which the list of attributes is requested. An urn name is an object name. If no urn name is given, the list of urns that have at least one sample in the partition is shown. This list includes the number of samples for each urn.

  Use the `-q| --quiet` to avoid displaying warning messages.

Checking Partitions

You can check the partitions to determine if a conversion is necessary through the Oracle Enterprise Manager Ops Center's command line.

- Enter `check`.

Converting Partition Samples to a new Format

You can convert samples of a partition to a new format through the Oracle Enterprise Manager Ops Center's command line.

- Enter `convert`.

Use the `-p| --id <partition ID>` option to specify a partition.

Use the `-n| --n <number of samples>` option to specify the number of samples.

Use the `-q| --quiet` to avoid displaying warning messages.

Purging Format Partition Samples

You can purge the old format partition samples through the Oracle Enterprise Manager Ops Center's command line.

- Enter `purge`.

  Use the `-p| --id <partition ID>` option to specify a partition.

  Use the `-n| --n <number of samples>` option to specify the number of samples.

  Use the `-q| --quiet` to avoid displaying warning messages.

Enabling Automatic Rollup and Cleanup

You can get the current average of samples in a partition and remove old samples through the Oracle Enterprise Manager Ops Center's command line.

You can enable automatic rollup to calculate an average of samples, and cleanup to remove old samples in a partition.

- Enter `enable`.

Disabling Automatic Rollup and Cleanup

You can disable automatic rollup and cleanup in a partition through the Oracle Enterprise Manager Ops Center's command line.

- Enter `disable`.

Starting Manual Rollup

You can start the rollup process manually for a specific partition through the Oracle Enterprise Manager Ops Center's command line.

The rollup process calculates the average of samples in a partition, it is started every hour, and operates on one partition at a time. To use this command, the automatic rollup should be disabled. For more information about how to disable the automatic rollup process, see Disabling Automatic Rollup and Cleanup.

- Enter `rollup`.

  Use the `-p| --id <partition ID>` option to specify a partition. If no partition is given, the reporting service automatically selects the oldest partition that has not been rolled up.

  Use the `-t| --t <milliseconds>` option to specify a pause time in milliseconds.

  Use the `-q| --quiet` to avoid displaying warning messages.

Starting Manual Cleanup

You can start the cleanup process manually through the Oracle Enterprise Manager Ops Center's command line.

The cleanup process removes old samples. This process is started every hour, and it removes only the partitions that are previously rolled-up. For more information about how to roll-up a partition, see Starting Manual Rollup.

- Enter `cleanup`.

  Use the `-t| --t <milliseconds>` option to specify a pause time in milliseconds.

  Use the `-q| --quiet` to avoid displaying warning messages.

Viewing Detailed Rollup and Cleanup Information

You can view detailed information about the rollup and cleanup processes through the Oracle Enterprise Manager Ops Center's command line.

- Enter `info`.

Viewing Rollup and Cleanup Statistics

You can view the statistics for the rollup and cleanup processes through the Oracle Enterprise Manager Ops Center's command line.

- Enter `stats`.

Resetting Rollup Statistics

You can reset the statistics related to the rollup and cleanup processes through the Oracle Enterprise Manager Ops Center's command line.

The counters and gauges are reset.

- Enter `reset_stats`.

Setting the Pause Time

You can set the pause time used for the rollup and cleanup processes through the Oracle Enterprise Manager Ops Center's command line.

This value is set in milliseconds. The default value is 1000 milliseconds.

- Enter `pause -t| --t <milliseconds>`.

Resetting a Partition

You can revert the effects of a partition through the Oracle Enterprise Manager Ops Center's command line.

You can reset a specific partition to revert the effects of a rollup that has been previously applied.

- Enter `reset -p| --id <partition ID>`.

  Use the `-t| --t <milliseconds>` option to specify a pause time in milliseconds.

  Use the `-q| --quiet` to avoid displaying warning messages.

Deleting a Partition

You can delete a specific partition through the Oracle Enterprise Manager Ops Center's command line.

- Enter `delete -p| --id <partition ID>`.

  Use the `-t| --t <milliseconds>` option to specify a pause time in milliseconds.

  Use the `-q| --quiet` to avoid displaying warning messages.

Security

You can perform security operations through the Oracle Enterprise Manager Ops Center's command line.

Use the Security mode to manage the certificates that enable the communication between the Enterprise Controller and Proxy Controllers and between a Proxy Controller and its assets. This mode consists of subcommands that manage the authorizations between components of the architecture:

- Subcommands ending with `_proxy` control certificates in the communication between the Enterprise Controller and the specified Proxy Controller.
- Subcommands ending with `_asset` control certificates in the communication between a Proxy Controller and a physical or virtual asset.

Starting Security Mode

You can perform security operations through the Oracle Enterprise Manager Ops Center's command line.

You must switch to security mode to run security commands.

- Enter `security` in the CLI prompt.

```
localhost > security
localhost/security >
```

Listing Certificates

You can view information about the certificates used by the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list_proxy`.

You can view information about the certificates used by a specific Proxy Controller to communicate with its assets.

- Enter `list_asset -p <proxyID>`.

Viewing Certificates

You can view information a certificate, including how long before it expires, through the Oracle Enterprise Manager Ops Center's command line.

- Enter `check_proxy`.
- Enter `check_asset -p <proxyID>`.

Updating Certificates

You can renew certificates through the Oracle Enterprise Manager Ops Center's command line.

You must update certificates before they expire. You can update credentials for more than one asset or Proxy Controller at a time.

- Enter `push_asset -k` *`keystore`* `-p` *`proxyID`* `[-w` *`keystore_password`*`] [-a` *`assetname`*`] [-n` *`number`*`]`.
- Enter `push_proxy -k` *`keystore`* `-p` *`proxyID`* `[-w` *`keystore_password`*`] [-n` *`number`*`]`.

Deleting Certificates

You can delete unused certificates through the Oracle Enterprise Manager Ops Center's command line.

- Enter `remove_asset -s` *`serialnumber`* `[-p` *`proxyID`*`] [-a` *`assetname`*`] [-n` *`number`*`] [-i` *`issuer`*`] [-l` *`alias`*`]`.

- Enter `remove_proxy -s` *`serialnumber`* `[-p [`*`proxyID`*`] [-n` *`number`* `] [-i` *`issuer`*`] [-l` *`alias`*`]`.

Propagating the UCE Proxy Certificate

You can propagate the current UCE proxy certificate to each agent that may need it.

Enter `push_uce -p <proxy> [-a <asset>]`

Serverpools

You can perform operations on server pools through the Oracle Enterprise Manager Ops Center's command line.

Use the Serverpools mode to view the existing server pools, and to list and remove a member from a server pool.

Starting Serverpools Mode

You can perform operations on server pools through the Oracle Enterprise Manager Ops Center's command line.

You must switch to serverpools mode to run server pool commands.

- Enter `serverpools` in the CLI prompt.

```
localhost > serverpools
localhost/serverpools >
```

Viewing Server Pools

You can view a list of existing server pools through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list`.

Viewing Members of a Server Pool

You can view the members of a server pool through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list_members -U| --UUID <Server Pool UUID>`.

  Use the `-l|--detail` option to include detailed credential information.

Removing a Member From a Server Pool

You can remove a member or a list of members from a server pool through the Oracle Enterprise Manager Ops Center's command line.

- Enter `remove_members -U| --UUID <Server Pool UUID> -M| --members <Server UUID>`.

  Use the `-f|--force` option to force the server removal from the server pool.

Stats

You can view statistics about the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

Stats mode reports:

- Percentage of memory used

- Free memory (MB)
- Average load (15 minutes)
- CPU utilization percentage

Starting Stats Mode

You can display statistics through the Oracle Enterprise Manager Ops Center's command line.

You must switch to stats mode to run stats commands.

- Enter `stats` in the CLI prompt.

```
localhost > stats
localhost/stats >
```

Viewing Statistics

You can view statistics about the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

- Enter `show`.

```
Name                 Used Mem %   Free Mem (MB)  Avg Load 15min  CPU Util %
-------------------------------------------------------------------------------
EnterpriseController  34.28         6646          1.74             75.00
EnterpriseController  34.28         6646          1.74             75.00
EnterpriseController  34.28         6646          1.74             75.00
```

Use the `-i| --interval <interval>` option to specify a repeat interval in seconds.

Update

You can perform update operations through the Oracle Enterprise Manager Ops Center's command line.

Use the Update mode to view and manage policies, profiles, and snapshots for OS updates.

Starting Update Mode

You can perform update operations through the Oracle Enterprise Manager Ops Center's command line.

You must change to update mode to run these commands.

- Enter `update` in the CLI prompt.

```
localhost > update
localhost/update >
```

Viewing OS Update Policies

You can view the available OS update policies through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list_policies`.

  Use the `-l| --detail` option to display a detailed list.

Use the `-p| --policyname <profile_name>` option to display policies with a specific policy name.

Viewing OS Update Profiles

You can view the available OS update profiles through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list_profiles`.

  Use the `-l| --detail` option to display a detailed list.

  Use the `-p| --profilename <profile name>` option to display profiles with a specific profile name.

Viewing OS Distributions

You can view the available distributions through the Oracle Enterprise Manager Ops Center's command line.

By default, this command shows only active distributions.

- Enter `list_distros`.

  Use the `-a| --all` option to display inactive and active distributions.

Viewing Snapshots

You can view the snapshots for a specific asset through the Oracle Enterprise Manager Ops Center's command line.

- Enter `list_snapshots -g| --gear <asset name>`.

Searching Inventory

You can search an OS asset or all assets for inventory whose name matches a search string through the Oracle Enterprise Manager Ops Center's command line.

The search string must be a regular expression. For a summary of regular expression constructs, visit `http://docs.oracle.com/javase/7/docs/api/java/util/regex/Pattern.html`.

- Enter `search_inventory -s| --search_string <search string>`.

  Enter the `-g| --gear <asset name>` option to search a specific asset, or use the `-a| --allgear` option to search all gear. You must use one of these two options.

  Use the `-t| --snapshot <snapshot name>` option to search for a specific snapshot. This option can only be used with the `-g` option.

  Use the `-D| --description` option to search descriptions.

  Use the `-c| --cvs` option to output to comma-separated values (CSV).

  Use the `-f| --filename <filename>` option to specify a filename for CSV output.

  Use the `-d| --delimiter <delimiter>` option to specify a delimiter character. The default is the pipe (|) character.

  Use the `-e| --enclosure <enclosure>` option to specify an enclosure character. The default is the quote (") character.

  Use the `-p| --append` option to append the data to an existing file.

Use the `-l| --detail` option to display detailed data.

Checking Inventory

You can check an OS asset to see if inventory is available for it through the Oracle Enterprise Manager Ops Center's command line.

- Enter `check_inventory`.

  Enter the `-g| --gear <asset name>` option to check a specific asset, or use the `-a| --allgear` option to check all assets. You must use one of these two options.

  Use the `-t| --snapshot <snapshot name>` option to check a specific snapshot. This option can only be used with the `-g` option.

  Use the `-c| --cvs` option to output to comma-separated values (CSV).

  Use the `-f| --filename <filename>` option to specify a filename for CSV output.

  Use the `-d| --delimiter <delimiter>` option to specify a delimiter character. The default is the pipe (`|`) character.

  Use the `-e| --enclosure <enclosure>` option to specify an enclosure character. The default is the quote (") character.

  Use the `-r| --header` option to include a header line.

  Use the `-p| --append` option to append the asset data to an existing file.

Checking Connectivity to the Knowledge Base

You can verify your connection to the Knowlwedge Base through the Oracle Enterprise Manager Ops Center's command line.

- Enter `check_guus`.

  Use the `-u| --user <user name>` option to specify a user name.

  Use the `-p| --password <password>` option to specify a password.

  Use the `--proxy <proxy host name>` option to specify a proxy.

  Use the `--port <proxy port>` option to specify a proxy port.

  Use the `--proxyuser <proxy user name>` option to specify a proxy user name.

  Use the `--proxypass <proxy password>` option to specify a proxy password.

Querying Job History

You can view the job history for a specific OS asset through the Oracle Enterprise Manager Ops Center's command line.

- Enter `job_history -g| --gear <asset list>`.

  Use the `-l| --detail` option to show a detailed listing.

  Use the `-f| --fromdate <from date YYYYMMDD>` option to specify a from date. The default is seven days ago.

  Use the `-t| --todate <to date YYYYMMDD>` option to specify an end date. The default is today.

Use the `-i| --jobids < job ID>` option to query a specific job or jobs, you must still supply the asset name.

Use the `-L| --log` option to print logs.

Use the `--fail` option to query failed status.

Use the `--ok` option to query ok status.

Use the `--warning` option to query warning status.

Use the `--nostatus` option to query nostatus status.

Use the `--install` option to query **install** action.

Use the `--upgrade` option to query **upgrade** action.

Use the `--uninstall` option to query **uninstall** action.

Use the `--downgrade` option to query **downgrade** action.

Querying Job Status

You can get information about a job status through the Oracle Enterprise Manager Ops Center's command line.

- Enter `get_job_status`.

  Enter the `-i| --jobids <job ID>` option to query specific jobs, or use the `-a| --alljobs` option to query all jobs. You must use one of these two options.

  Use the `-l| --detail` option to print out detail, including logs if available.

  Use the `-c| --cvs` option to output to comma-separated values (CSV).

  Use the `-f| --filename <filename>` option to specify a filename for CSV output.

  Use the `-d| --delimiter <delimiter>` option to specify a delimiter character. The default is the pipe (|) character.

  Use the `-e| --enclosure <enclosure>` option to specify an enclosure character. The default is the quote (") character.

  Use the `-r| --header` option to include a header line.

  Use the `-p| --append` option to append the asset data to an existing file.

Uploading a Knowledge Base Bundle

You can update the Knowledge Base bundles in the Update software library through the Oracle Enterprise Manager Ops Center's command line.

Knowledge base bundles contain current patch data. A knowledge base bundle must be moved to the system running the Enterprise Controller before it can be uploaded.

- Enter `load_kb_bundle -f| --filename <path to KB bundle>`.

Checking the Connection Mode

You can check the connection mode through the Oracle Enterprise Manager Ops Center's command line.

- Enter `check_disconnected`.

Changing to Connected Mode

You can change the Enterprise Controller from disconnected to connected mode through the Oracle Enterprise Manager Ops Center's command line.

- Enter `set_connected_mode -c| --connected`.

Changing to Disconnected Mode

You can change the Enterprise Controller from connected to disconnected mode through the Oracle Enterprise Manager Ops Center's command line.

- Enter `set_connected_mode -d| --disconnected`

Modifying an OS Asset

You can update a specific OS asset through the Oracle Enterprise Manager Ops Center's command line.

The update includes installing, upgrading, or uninstalling specific packages and patches

- Enter `modify_gear -g| --gear <assetname> -y| --policy <policy name> -a| --actual`.

  Omit the `-a` option to run the job as a simulation.

  Use the `--si <search string>` option to specify a search term to add to the install list.

  Use the `--su <search string>` option to specify a search term to add to the upgrade list.

  Use the `--sr <search string>` option to specify a search term to add to the uninstall list.

  The search strings used for this command must be regular expressions. For a summary of regular expression constructs, visit `http://docs.oracle.com/javase/7/docs/api/java/util/regex/Pattern.html`.

  Use the `--ni <node IDs to install>` option to specify node IDs for install.

  Use the `--nu <node IDs to upgrade>` option to specify node IDs for upgrade.

  Use the `--nr <node IDs to uninstall>` option to specify node IDs for uninstall.

  Use the `-j| --jobname <job name>` option to specify a job name.

  Use the `-e| --jobdesc <job description>` option to specify a job description.

  Use the `-k| --taskname <taskname>` option to specify a task name.

  Use the `-f| --profilename <profile name>` option to specify a profile name.

  Use the `-D| --description <profile description>` option to specify a profile description.

  Use the `-r| --failure_policy <failure policy>` option to specify a failure policy.

Use the `-x| --execution_policy <execution policy>` option to specify an execution policy.

Use the `-o| --seconds <number of seconds>` option to wait a specified number of seconds before running the job.

Use the `-c| --case` option to run a case sensitive search.

Use the `-d| --desc` option to search the description.

Example:

```
localhost/update > modify_gear -g "foo.example.com" --sr SUNWbzip -y "Yes To All"
-a
```

Applying an Update Profile to an OS Asset

You can apply a profile to an asset that updates all packages and patches to match the profile through the Oracle Enterprise Manager Ops Center's command line.

- Enter `apply_profile_to_gear -g | --gear <assetname> -y| --policy <policy name> -f| --profilename <profile name> -a| --actual`

  Omit the `-a` option to run the job as a simulation.

  Use the `-j| --jobname <job name>` option to specify a job name.

  Use the `-e| --jobdesc <job description>` option to specify a job description.

  Use the `-k| --taskname <taskname>` option to specify a task name.

  Use the `-r| --failure_policy <failure policy>` option to specify a failure policy.

  Use the `-x| --execution_policy <execution policy>` option to specify an execution policy.

  Use the `-o| --seconds <number of seconds>` option to wait a specified number of seconds before running the job.

  The following is an example of a command to deploy a profile job to one or more hosts:

  ```
  localhost/update > apply_profile_to_gear -g <space separated list of host names> -
  y "Yes To All" -f <profile name>
  ```

Creating a Historical Snapshot

You can create a historical snapshot through the Oracle Enterprise Manager Ops Center's command line.

- Enter `create_historical_snapshot -g| --gear <asset name> -s| --snapshotname <snapshot name> -D| --description <snapshot description>`.

Deleting a Snapshot

You can delete an existing snapshot of an asset through the Oracle Enterprise Manager Ops Center's command line.

- Enter `delete_snapshots -g| --gear <asset name> -s| --snapshot <snapshot name>`.

Creating a Profile

You can create profiles that install and upgrade assets through the Oracle Enterprise Manager Ops Center's command line.

You can create a new profile by specifying packages and patches to install, upgrade, and uninstall.

- Enter `create_profile`.

  You must supply a search string or node id. The search string used for this command must be a regular expression. For a summary of regular expression constructs, visit `http://docs.oracle.com/javase/7/docs/api/java/util/regex/Pattern.html`.

  Use the `--si <search string>` option to specify a search term to add to the install list.

  Use the `--su <search string>` option to specify a search term to add to the upgrade list.

  Use the `-sr <search string>` option to specify a search term to add to the uninstall list.

  Use the `--ni <node IDs to install>` option to specify node IDs for install.

  Use the `--nu <node IDs to upgrade>` option to specify node IDs for upgrade.

  Use the `--nr <node IDs to uninstall>` option to specify node IDs for uninstall.

  Use the `-f| --profilename <distribution name>` option to specify a profile name.

  Use the `-o| --distro <profile name>` option to limit by distro name.

  Use the `-C <channel name>` option to specify the channel name for all subcommands.

  Use the `-D| --description <profile description>` option to specify a profile description.

  Use the `-t| --type <profile description>` option to specify a profile type.

  Use the `-a| --all` option to include all matched packages/patches.

  Use the `-c| --case` option to run a case sensitive search.

  Use the `-r| --replace` option to replace an existing profile if the names are the same.

  Use the `-p| --loop` option to restrict the maximum number of inventory items found in a host.

Creating a Profile From Inventory

You can create a new OS profile based on an existing system through the Oracle Enterprise Manager Ops Center's command line.

- Enter `create_profile_from_inventory -g| --gear <gear name>`.

  Use the `-t| --snapshot <snapshot name>` option to search for a specific snapshot. This option can only be used with the `-g` option.

Use the `-f| --profilename <profile name>` option to specify a profile name.

Use the `-D| --description <profile description>` option to specify a profile description.

Use the `-r| --include_removes` option to include removed packages.

Deleting a Profile

You can delete a profile through the Oracle Enterprise Manager Ops Center's command line.

- Enter `delete_profiles -p| --profilename <profile name>`.

Adding a File to a Distribution

You can add a file stored on the Enterprise Controller to a distribution through the Oracle Enterprise Manager Ops Center's command line.

- Enter `add_file_to_distro -f| --file_path <full path to distribution> -o| --distro_name <distro name> -a| --category_name <category name> -C| --channelname <channel name> -s | --security`.

Uploading Local Software in Bulk From a Directory

You can upload the contents of a directory to the Updates software library through the Oracle Enterprise Manager Ops Center's command line.

You can upload content from a directory and its subdirectories to the Updates software library.

- Enter `bulk_upload_directory -D| --distribution <distribution name of uploaded files> -d| --directory <full path to the source directory> -C| --channelname <channel name>.`

Note:

For more information about how to view the available distributions, see Viewing OS Distributions

---

Adding a Local Action

You can add a local action through the Oracle Enterprise Manager Ops Center's command line.

- Enter `add_local_action -a| --actionname <action name> -f| --filename <file name> -p| --parentname <parent category name> -D| --description <description> -C| --channelname <channel name> -t`.

  The action type must be **macro**, **postaction**, **preaction**, or **probe**.

Adding a Local Category

You can add a local categorythrough the Oracle Enterprise Manager Ops Center's command line.

- Enter `add_local_category -c| --category_name <category name> -p| --parent_name <parent name> -D| --description <description> -C| --channelname <channel name>`.

Deleting a Component

You can delete a component through the Oracle Enterprise Manager Ops Center's command line.

- Enter `delete_component -i| --nodeid <node id> -d| --distro <distro> -C | --channelname <channel name>`.

  Use the `-k| --donotcheckforinstall` option to refrain from checking for install.

Adding a Configuration File

You can add a configuration file through the Oracle Enterprise Manager Ops Center's command line.

- Enter `add_configuration_file -f| --filename <filename> -p| --pathname <path name to file> -v| --version <version> -c| --categoryname <category name> -D| --description <description> -C| --channelname <channel name>`.

Setting a Component File

You can set a component file through the Oracle Enterprise Manager Ops Center's command line.

- Enter `set_component_file -n| --componentname <component name> -C| --channelname <channel name> -f| --filename <file name>`.

Finding Nodes

You can find nodes whose names match a search string using the Oracle Enterprise Manager Ops Center's command line.

The search string used for this command must be a regular expression. For a summary of regular expression constructs, visit http://docs.oracle.com/javase/7/docs/api/java/util/regex/Pattern.html.

- Enter `find_nodes -s| --search_string <search string>`.

  Use the `-a| --all` option to list all nodes.

  Use the `-l| --detail` option to print details.

  Use the `-c| --case` option to specify a case-sensitive search.

  As the following examples shows, when regular expressions are not used correctly, any node is listed as a result:

```
localhost/update > find_nodes -s SMCcurl-7.21* -a
Name                          Node id    Distro          Available  Certified
-------------------------------------------------------------------------------
```

```
localhost/update > find_nodes -s SMCcurl-7.21.2-0 [1/1/2012] -a
Name                          Node id    Distro          Available  Certified
-------------------------------------------------------------------------------
```

Correct examples:

```
localhost/update > find_nodes -s SMCcurl-7.21.* -a
Name                          Node id    Distro          Available  Certified
-------------------------------------------------------------------------------
SMCcurl-7.21.0-0 [1/1/2012]   41025315   SOLARIS10_SPARC  True       True
SMCcurl-7.21.1-0 [1/1/2012]   41125695   SOLARIS10_SPARC  True       True
SMCcurl-7.21.2-0 [1/1/2012]   42327548   SOLARIS10_SPARC  True       True

EnterpriseContoller/update > find_nodes -s SMCcurl-* -a
Name                          Node id    Distro          Available  Certified
-------------------------------------------------------------------------------
SMCcurl                       41002397   SOLARIS10_SPARC False      True
SMCcurl                       46108251   SOLARIS9_SPARC  False      True
SMCcurl                       52104822   SOLARIS10_X86   False      True
```

User

You can perform operations for users through the Oracle Enterprise Manager Ops Center's command line.

Use the User mode to view and manage local and remote users and their roles.

Starting User Mode

You can perform operations for users through the Oracle Enterprise Manager Ops Center's command line.

- Enter `user` in the CLI prompt.

```
localhost > user
localhost/user >
```

Viewing Users

You can view the existing users in the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

- Enter `show_local_users`.

  A list of users is shown.

  Use the `-r| --roles <role name>` option to view users with `<role name>` role. A list of users and their roles are shown.

Viewing Role Types

You can view the available role types in the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

- Enter `show_all_local_roles`.

Viewing User Roles

You can view the roles assigned to a specific user in the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

- Enter `show_local_user_roles -u| --user <user name>`.

Adding a User to the Enterprise Controller

You can add a user to the Enterprise Controller and grant a role to the new user through the Oracle Enterprise Manager Ops Center's command line.

The user must already exist in the host where the Enterprise Controller is installed.

- Enter `add_local_user -u| --user <user name> -r| --role <role or comma-separated roles list>`.

  For information about the available role types you can grant to a user, see Viewing Role Types.

Granting Roles to a User

You can grant a role to a user through the Oracle Enterprise Manager Ops Center's command line.

- Enter `grant_local_role -u| --user <user name> -r| --role <role or comma-separated roles list>`.

  For information about the available role types you can grant to a user, see Viewing Role Types.

Replicating User Roles

You can replicate the roles from a source user to a recipient user through the Oracle Enterprise Manager Ops Center's command line.

The current roles and privileges of the recipient users are overwritten with the roles and privileges of the source user.

- Enter `replicate_user_roles -u|--user <source user> -r| --role <recipient user>`.

Removing Roles From a User

You can remove a role from a user of the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

For more information about how to see the roles of a user, see Viewing User Roles.

- Enter `revoke_local_role -u| --user <user name> -r| --role <role or list of comma-separated roles to remove>`.

Viewing Permissions of a User

You can view and save the permissions of a specific user through the Oracle Enterprise Manager Ops Center's command line.

You can display the permissions assigned to the specified user account and output the results to a file.

- Enter `show_user_permissions -u|--user` *`username`* `[-f|--format json|xml|plain|csv] [-o|--outputfile` *`filename`*`]`.

Adding a Directory Server

You can add a directory server through the Oracle Enterprise Manager Ops Center's command line.

1. Enter `configureds`.

   ```
   localhost/user > configureds
   localhost/user/configureds >
   ```

2. Enter `set name=<name>` to set the directory server name.
3. Enter `set hostname=<host name>` to set a fully qualified host name.
4. Enter `set use_ssl=<false|true>` if you want to enable or disable SSL. Default is `false`.
5. Enter `set port=<port>` to set a port.
6. Enter `set user=<user name>` to set a user name to connect with.
7. Enter `set password=<password>` to set a password.
8. Enter `set root_suffix=<root suffix>` to set the root suffix.
9. Enter `set user_dn=<user DN>` to set the user search DN.
10. Enter `set user_scope=<user scope>` to set the user search scope.
11. Enter `set search_filter=<search filter>` to set the user search filter.
12. (Optional) Use the `show` command to show the values of all directory server properties. If necessary, use the `unset <property>` command to unset a property or the `reset` command to reset all properties.
13. Use the `commit` command to finish configuring the directory server.

Viewing Directory Servers

You can view a list of directory servers and their IDs through the Oracle Enterprise Manager Ops Center's command line.

- Enter `get_directory_servers`.

  Use the `-d| --details` option to show directory server details.

Viewing Remote Users

You can get a list of directory server users and their roles through the Oracle Enterprise Manager Ops Center's command line.

- Enter `get_ds_users -d| --directory <directory server name>`.

  Use the `-r| --roles <role>` option to filter users with `<role>` role.

Synchronizing All Remote Users

You can synchronize all directory server users and their roles with the cache on the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

- Enter `sync_all_ds_users -d| --directory <directory server name>`.

Synchronizing a Single User

You can synchronize a specific user on the directory server with the cache on the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

- Enter `sync_ds_user -d| --directory <directory server name> -u| --user <user>`.

Removing a Directory Server

You can remove a directory server from the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

- Enter `remove_directory_service -d| --directory <directory server name>`.

Deleting a Local User

You can delete a local user in the Enterprise Controller through the Oracle Enterprise Manager Ops Center's command line.

- Enter `delete_local_user -u| --user <user name>`.

Virtualization

You can use the Virtualization mode to manage virtual assets through the Oracle Enterprise Manager Ops Center's command line.

The virtualization mode manages virtual hosts and virtual machines (Oracle Solaris zones only).

Starting Virtualization Mode

You can perform operations on virtual assets through the Oracle Enterprise Manager Ops Center's command line.

- Enter `virtualization` in the CLI prompt.

```
localhost > virtualization
localhost/virtualization >
```

Viewing Hosts

You can view the list of global zones or control domains through the Oracle Enterprise Manager Ops Center's command line.

Use this subcommand to get the UUID of a global zone or control domain, which you can use with the `list_guests` and `list_libraries` subcommands.

- Enter `list_hosts`.

Viewing Guests

You can view the list of non-global zones for a specific global zone or the list of logical domains for a control domain through the Oracle Enterprise Manager Ops Center's command line.

You can identify the global zone or control domain by its UUID or its object name. Use this command to obtain the UUID of a guest to use with the `guest` subcommand.

- Enter `list_guests -C| --container-on` *Objectname*.
- Enter `list_guests -U| --UUID` *assetuuid*.

Viewing Libraries of a Global Zone or Control Domain

through the Oracle Enterprise Manager Ops Center's command line.

You can view the list of libraries available to the agent-managed container, identified by its UUID .

- Enter `list_libraries -U| --UUID` *assetuuid*.

Migrating a Non-Global Zone

You can move a non-global zone through the Oracle Enterprise Manager Ops Center's command line.

You can detach a non-global zone from its non-functioning global zone and attach the non-global zone to a different global zone.

- Enter `startup (-z zonename -S ObjectName | -Z ObjectName) -D ObjectName`.

  Use the `-z| --zonename` option to specify a guest (non-global zone). If you select this option you must specify a source global zone object name.

  Use the `-S| --source-on` option if you specify a zonename before. Using this option you specify a source global zone object name.

  Use the `-Z| --zone-on` option in case you did not select the `-z| --zonename` option. Using this option you indicate the host (global zone) object name.

  Use the `-D| --destination` option to indicate the destination (global zone).

Finding the Equivalent Browser User Interface Actions For the Mode Commands

You can use the Oracle Enterprise Manager Ops Center browser user interface (BUI) instead of using the command-line interface.

You can find in the browser user interface many, but not all, equivalent actions for the CLI mode commands.

The following charts show the mode commands that have a corresponding action in the browser user interface:

- Controllers Mode
- Credentials Mode
- Deploy-Setup Mode
- Deploy Mode

- Discover Mode
- FWImage Mode
- FWProfile Mode
- Gear Mode
- Groups Mode
- Guest Mode
- Incidents Mode
- Jobs Mode
- Notifications Mode
- OSImage Mode
- OSProfile Mode
- ServerPools Mode
- Update Mode
- User Mode
- Virtualization Mode

Controllers Mode

The Controllers mode migrates assets to another Proxy Controller through the Oracle Enterprise Manager Ops Center's command line.

Table 1-6 shows the commands included in the Controllers mode and their equivalent actions in the BUI.

Table 1-6 Controllers Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
list	Open the alert indicating that a Proxy Controller has failed > Migrate Assets > Auto Balance across Proxy Controllers> Migrate
migrate_assets	Open the alert indicating that a Proxy Controller has failed> Migrate Assets> Auto Balance across Proxy Controllers> Migrate

Credentials Mode

You can perform operations on credentials through the Oracle Enterprise Manager Ops Center's command line.

Table 1-7 shows the commands included in the Credentials mode and their equivalent actions in the BUI.

Table 1-7 Credentials Mode Commands and Their Equivalent Actions in the BUI

Table 1-7 (Cont.) Credentials Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
list	Navigation Pane> Administration> Enterprise Controller> Credentials
modify	Navigation Pane> Administration> Enterprise Controller> Credentials> Edit Credentials

Deploy-Setup Mode

You can perform Deploy-Setup operations through the Oracle Enterprise Manager Ops Center's command line.

Table 1-8 shows the commands included in the Deploy-Setup mode and their equivalent actions in the BUI.

Table 1-8 Deploy-Setup Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
plan	Navigation Pane> Plan Management> Deployment Plans
target	Navigation Pane> Plan Management> Deployment Plans> Select a type of plan> Select a plan> Action Pane> Apply Deployment Plan

Deploy Mode

You can perform deploy operations through the Oracle Enterprise Manager Ops Center's command line.

Table 1-9 shows the commands included in the Deploy mode and their equivalent actions in the BUI.

Table 1-9 Deploy Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
show plan	Navigation Pane> Plan Management> Deployment Plans> Select a type of plan> Select a plan> Center Pane> Details tab
show	NA
show results	Navigation Pane> Plan Management> Deployment Plans> Select a type of plan> Select a plan> Center Pane> Results tab
set	Navigation Pane> Plan Management> Deployment Plans> Select a type of plan> Select a plan> Actions Pane> Edit Deployment Plan
add	NA
dryrun	NA

Table 1-9 (Cont.) Deploy Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
apply	Navigation Pane> Plan Management> Deployment Plans> Select a type of plan> Select a plan> Actions Pane> Apply Deployment Plan

Discover Mode

You can perform discover operations through the Oracle Enterprise Manager Ops Center's command line.

Table 1-10 shows the commands included in the Discover mode and their equivalent actions in the BUI.

Table 1-10 Discover Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
create	NA
list_profiles	Navigation Pane> Plan Management> Profiles and Policies> Discovery
list_ranges	NA
list_credentials	Navigation Pane> Administration> Enterprise Controller> Credentials
list_profile_credentials	Navigation Pane> Plan Management> Profiles and Policies> Discovery> Select a Discovery Profile> Discovery Credentials table in the Center Pane.
list_profile_ranges	NA
list_networks	NA
execute	Navigation Pane> Plan Management> Profiles and Policies> Discovery> Select a Discovery Profile> Actions Pane> Add Assets

FWImage Mode

You can perform operations on firmware images through the Oracle Enterprise Manager Ops Center's command line.

Table 1-11 shows the commands included in the FWImage mode and their equivalent actions in the BUI.

Table 1-11 FWImage Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
list	NA
create	NA

Table 1-11 (Cont.) FWImage Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
update	Navigation Pane> Libraries> Software Libraries> Initial EC Library> Actions Pane> Upload Firmware
delete	NA

FWProfile Mode

You can perform operations on firmware profiles through the Oracle Enterprise Manager Ops Center's command line.

Table 1-12 shows the commands included in the FWProfile mode and their equivalent actions in the BUI.

Table 1-12 FWProfile Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
list	Navigation Pane> Plan Management> Profiles and Policies> Firmware
status	NA
create	Navigation Pane> Plan Management> Profiles and Policies> Firmware> Actions Pane> Create Profile
update	Navigation Pane> Plan Management> Profiles and Policies> Firmware> Center Pane> Edit
delete	Navigation Pane> Plan Management> Profiles and Policies> Firmware> Center Pane> Delete

Gear Mode

You can perform operations on assets through the Oracle Enterprise Manager Ops Center's command line.

Table 1-13 shows the commands included in the Gear mode and their equivalent actions in the BUI.

Table 1-13 Gear Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
list	Navigation Pane> Assets> All Assets
update	Navigation Pane> Assets> All Assets> Select an asset> Actions Pane> Edit Attributes or Edit Tags
show_jobs	Navigation Pane> Assets> All Assets> Jobs tab
manage	Navigation Pane> Assets> All Assets> Select an asset> Actions Pane> Switch Management Access

Table 1-13 (Cont.) Gear Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
unmanage	Navigation Pane> Assets> All Assets> Select an asset> Actions Pane> Switch Management Access
set_maintenance	Navigation Pane> Assets> All Assets> Select an asset> Actions Pane> Place in Maintenance Mode or Remove From Maintenance Mode
delete	Navigation Pane> Assets> All Assets> Select an asset> Actions Pane> Delete Assets
reinstall_agent	Navigation Pane> Assets> All Assets> Select an OS> Actions Pane> Switch Management Access
reboot	Navigation Pane> Assets> All Assets> Select an OS> Actions Pane> Reboot
apply_firmware	Navigation Pane> Assets> All Assets> Select an asset> Actions Pane> Update Firmware
fwprofile_compliance	NA
provision_os	Navigation Pane> Plan Management> Deployment Plans> Provision OS> Select a Plan> Actions Pane> Apply Deployment Plan
set (locator lights)	Navigation Pane> Assets> All Assets> Select an asset> Actions Pane> Locator Lights On or Locator Lights Off
set (notifications)	NA
poweroff	Navigation Pane> Assets> All Assets> Select an asset> Actions Pane> Power Off
poweron	Navigation Pane> Assets> All Assets> Select an asset> Actions Pane> Power On
reset	Navigation Pane> Assets> All Assets> Select a server Actions Pane> Reset Server(s)
refresh	Navigation Pane> Assets> All Assets> Select a server Actions Pane> Refresh
Upgrade Agent Controller	Navigation Pane > Assets> All Assets> Select an asset> Actions Pane> upgrade Agent Controller
Upgrade All Agents	NA

Groups Mode

You can perform operations on groups of assets through the Oracle Enterprise Manager Ops Center's command line.

Table 1-14 shows the commands included in the Groups mode and their equivalent actions in the BUI.

Table 1-14 Groups Mode Commands and Their Equivalent Actions in the BUI

Table 1-14 (Cont.) Groups Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
list (Predefined Groups)	Navigation Pane> Assets> Server, Chassis, Operating Systems or All User Defined Groups
list_members	Navigation Pane> Assets> Server, Chassis, Operating Systems or All User Defined Groups
list_membership	Navigation Pane> Assets> Server, Chassis, Operating Systems or All User Defined Groups
create	Navigation Pane> Assets> All User Defined Groups> Actions Pane> Create Group
update	Navigation Pane> Assets> All User Defined Groups> Actions Pane> Edit Group
attach	Navigation Pane> Assets> All User Defined Groups> Actions Pane> Add Asset to Group
detach	Navigation Pane> Assets> All User Defined Groups> Actions Pane> Remove Asset from Group
move	Navigation Pane> Assets> All User Defined Groups> Actions Pane> Move Asset to Group
delete	Navigation Pane> Assets> All User Defined Groups> Actions Pane> Delete Group
poweron	Navigation Pane> Assets> All User Defined Groups> Actions Pane> Power On
poweroff	Navigation Pane> Assets> All User Defined Groups> Actions Pane> Power Off
reset	Navigation Pane> Assets> All User Defined Groups> Actions Pane> Reset Server (s)

Guest Mode

You can perform operations on logical domains and non-global zones through the Oracle Enterprise Manager Ops Center's command line.

Table 1-17 shows the commands included in the Guest mode and their equivalent actions in the BUI.

Table 1-15 Guest Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
info	Navigation Pane> Assets> All Assets> Select a guest> Summary
reboot,start,halt,shutdown,delete	Navigation Pane> Assets> All Assets> Select a guest> Actions Pane> reboot,start,halt,shutdown,delete

Incidents Mode

You can monitor and manage incidents through the Oracle Enterprise Manager Ops Center's command line.

Table 1-16 shows the commands included in the Incidents mode and their equivalent actions in the BUI.

Table 1-16 Incidents Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
list	Navigation Pane> Message Center> Unassigned Incidents, My Incidents or Incidents Assigned to Others
show	Navigation Pane> Message Center> Unassigned Incidents, My Incidents or Incidents Assigned to Others
acknowledge	Navigation Pane> Message Center> Unassigned Incidents, My Incidents or Incidents Assigned to Others> Acknowledge Incident(s)
annotate	Navigation Pane> Message Center> Unassigned Incidents, My Incidents or Incidents Assigned to Others> Add Annotation to Incident(s)
assign	Navigation Pane> Message Center> Unassigned Incidents, My Incidents or Incidents Assigned to Others> Assign Incident(s)
close	Navigation Pane> Message Center> Unassigned Incidents, My Incidents or Incidents Assigned to Others> Close Incident(s)

Jobs Mode

You can manage jobs through the Oracle Enterprise Manager Ops Center's command line.

Table 1-17 shows the commands included in the Jobs mode and their equivalent actions in the BUI.

Table 1-17 Jobs Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
list	Jobs Pane
run	Jobs Pane> Select a job> Re-Run Selected Jobs
rerun_on_failed	Jobs Pane> Select a failed job> Re-Run Selected Jobs
delete	Jobs Pane> Select a job> Delete Selected Jobs
stop	Jobs Pane> Select a job> Stop Selected Jobs

Notifications Mode

You can perform notifications through the Oracle Enterprise Manager Ops Center's command line.

Table 1-18 shows the commands included in the Notifications mode and their equivalent actions in the BUI.

Table 1-18 Notifications Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
list	Navigation Pane> Message Center>
delete	Navigation Pane> Message Center> Select a Notification> Delete

OSImage Mode

You can manage OS images through the Oracle Enterprise Manager Ops Center's command line.

Table 1-19 shows the commands included in the OSImage mode and their equivalent actions in the BUI.

Table 1-19 OSImage Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
list	Navigation Pane> Libraries> Software Libraries> Initial EC Library> Actions Pane> Import Image
import	Navigation Pane> Libraries> Software Libraries> Initial EC Library> Actions Pane> Import Image
delete	NA

OSProfile Mode

You can perform operations on profiles that provision an operating system through the Oracle Enterprise Manager Ops Center's command line.

Table 1-20 shows the commands included in the OSProfile mode and their equivalent actions in the BUI.

Table 1-20 OSProfile Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
list	Navigation Pane> Plan Management> Profiles and Policies> OS Provisioning
import_jet_template	Navigation Pane> Plan Management> Profiles and Policies> OS Provisioning> Create Profile> Select JET Template in the Subtype
import	Navigation Pane> Plan Management> Profiles and Policies> Update Profiles> Center Pane> Import Profile

Table 1-20 (Cont.) OSProfile Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
export	Navigation Pane> Plan Management> Profiles and Policies> Update Profiles> Center Pane> Export Profile
clone	Navigation Pane> Plan Management> Profiles and Policies> OS Provisioning> Center Pane> Copy Profile
delete	Navigation Pane> Plan Management> Profiles and Policies> OS Provisioning> Center Pane> Delete Profile

Reports Mode

You can perform Reports operations through the Oracle Enterprise Manager Ops Center's command line.

Table 1-20 shows the commands included in the Reports mode and their equivalent actions in the BUI.

Table 1-21 Reports Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
show	NA
start	NA
stop	NA
list	NA
partition	NA
urns	NA
enable	NA
disable	NA
rollup	NA
cleanup	NA
info	NA
stats	NA
reset_stats	NA
pause	NA
reset	NA
delete	NA

ServerPools Mode

You can perform operations on server pools through the Oracle Enterprise Manager Ops Center's command line.

Table 1-25 shows the commands included in the ServerPools mode and their equivalent actions in the BUI.

Table 1-22 ServerPools Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
list	Navigation Pane> Assets> Server Pools
list_members	Navigation Pane> Assets> Server Pools> Select a server pool
remove_members	Navigation Pane> Assets> Server Pools> Select a server pool> Select a server> Actions Pane> Remove from Server Pool

Update Mode

You can perform Update operations through the Oracle Enterprise Manager Ops Center's command line.

Table 1-23 shows the commands included in the Update mode and their equivalent actions in the BUI.

Table 1-23 Update Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
list_policies	Navigation Pane> Plan Management> Profiles and Policies> Update Policies
list_profiles	Navigation Pane> Plan Management> Profiles and Policies> Update Profiles
list_distros	Navigation Pane> Libraries> Software Libraries> Linux, Solaris 8-10 Software Update Library> Content tab> Search Criteria Menu> Distribution list
list_snapshots	NA
search_inventory	NA
check_inventory	NA
check_guus	NA
job_history	Navigation Pane> Assets> Select an asset> Jobs tab
get_job_status	Jobs Pane> Status column
load_kb_bundle	Navigation Pane> Administration> Enterprise Controller> Actions Pane> Setup Connection Mode
check_disconnected	Navigation Pane> Administration> Enterprise Controller> Actions Pane> Setup Connection Mode

Table 1-23 (Cont.) Update Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
set_connected_mode	Navigation Pane> Administration> Enterprise Controller> Actions Pane> Setup Connection Mode> Switch to Connected Mode or Switch to Disconnected Mode.
modify_gear	Navigation Pane> Assets> All Assets> Select an asset> Actions Pane> New Update OS Job
apply_profile_to_gear	Navigation Pane> Assets> All Assets> Select an asset> Actions Pane> New Update OS Job
create_historical_snapshot	NA
delete_snapshots	NA
create_profile	Navigation Pane> Plan Management> Profiles and Policies> Update Profiles> Actions Pane> New Profile
create_profile_from_inventory	NA
delete_profiles	Navigation Pane> Plan Management> Profiles and Policies> Update Profiles> Select a profile> Delete Profile
add_file_to_distro	NA
bulk_upload_directory	Navigation Pane> Libraries> Software Libraries> Linux, Solaris 8-10 Software Update Library> Actions Pane> Bulk Upload Packages
add_local_action	Navigation Pane> Libraries> Software Libraries> Linux, Solaris 8-10 Software Update Library> Actions Pane> Upload Local Action
add_local_category	Navigation Pane> Libraries> Software Libraries> Linux, Solaris 8-10 Software Update Library> Actions Pane> Add Local Category
delete_component	Navigation Pane> Libraries> Software Libraries> Linux, Solaris 8-10 Software Update Library> Actions Pane> Delete Local Component
add_configuration_file	Navigation Pane> Libraries> Software Libraries> Linux, Solaris 8-10 Software Update Library> Actions Pane> Upload Local Configuration
set_component_file	Navigation Pane> Libraries> Software Libraries> Linux, Solaris 8-10 Software Update Library> Actions Pane> Edit Local Component File
find_nodes	NA

User Mode

You can perform operations for users through the Oracle Enterprise Manager Ops Center's command line.

Table 1-24 shows the commands included in the User mode and their equivalent actions in the BUI.

Table 1-24 User Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
show_local_users	Navigation Pane> Administration> Enterprise Controller> Local Users
show_all_local_roles	Navigation Pane> Administration> Enterprise Controller> Local Users> Role Permission Mapping tab
show_local_user_roles	Navigation Pane> Administration> Enterprise Controller> Local Users
add_local_user	Navigation Pane> Administration> Enterprise Controller> Local Users > Actions Pane> Add User
grant_local_role	Navigation Pane> Administration> Enterprise Controller> Local Users> Manage User Roles icon
replicate_user_roles	Navigation Pane> Administration> Enterprise Controller> Local Users> Replicate User Roles icon
revoke_local_role	Navigation Pane> Administration> Enterprise Controller> Local Users> Manage User Roles icon
configureds	Navigation Pane> Administration> Enterprise Controller> Directory Serves> Add Directory Server
get_directory_servers	Navigation Pane> Administration> Enterprise Controller> Directory Serves>
get_ds_users	Navigation Pane> Administration> Enterprise Controller> Directory Serves> Select a Directory Server from the list> User tab
sync_all_ds_users	Navigation Pane> Administration> Enterprise Controller> Directory Serves> Select a Directory Server from the list> Actions Pane> Sync all remote users and roles
sync_ds_user	NA
remove_directory_service	Navigation Pane> Administration> Enterprise Controller> Directory Serves> Select a Directory Server from the list> Delete Directory Server
delete_local_user	Navigation Pane> Administration> Enterprise Controller> Directory Serves> Select a Directory Server from the list> User tab> Select a user> Delete User

Virtualization Mode

You can perform operations on virtual assets through the Oracle Enterprise Manager Ops Center's command line.

Table 1-25 shows the commands included in the Virtualization mode and their equivalent actions in the BUI.

Table 1-25 Virtualization Mode Commands and Their Equivalent Actions in the BUI

CLI Command	BUI Action
list_hosts	Navigation Pane> Assets> All Assets> Servers
list_guests -C | --container-on	Navigation Pane> Assets> All Assets> Servers
startup	Navigation Pane> Assets> All Assets> Select a non-global zone> Actions Pane> Migrate Zone

Index

A

C

F

G

H

I

J

M

N

O

P

R

S

U

V