



Overview of the Cisco UCS Central CLI

This chapter includes the following sections:

- [Managed Objects, page 1](#)
- [Command Modes, page 1](#)
- [Object Commands, page 2](#)
- [Complete a Command, page 3](#)
- [Command History, page 3](#)
- [Committing, Discarding, and Viewing Pending Commands, page 3](#)
- [Online Help for the CLI, page 4](#)
- [Logging into and out of the Cisco UCS Central GUI, page 4](#)
- [Configuring Identifier Policies, page 5](#)

Managed Objects

Cisco UCS uses a managed object model, where managed objects are abstract representations of physical or logical entities that can be managed. For example, servers, chassis, I/O cards, and processors are physical entities represented as managed objects, and resource pools, user roles, service profiles, and policies are logical entities represented as managed objects.

Managed objects may have one or more associated properties that can be configured.

Command Modes

The CLI is organized into a hierarchy of command modes, with the EXEC mode being the highest-level mode of the hierarchy. Higher-level modes branch into lower-level modes. You use **create**, **enter**, and **scope** commands to move from higher-level modes to modes in the next lower level, and you use the **exit** command to move up one level in the mode hierarchy.

**Note**

Most command modes are associated with managed objects, so you must create an object before you can access the mode associated with that object. You use **create** and **enter** commands to create managed objects for the modes being accessed. The **scope** commands do not create managed objects and can only access modes for which managed objects already exist.

Each mode contains a set of commands that can be entered in that mode. Most of the commands available in each mode pertain to the associated managed object. Depending on your assigned role and locale, you may have access to only a subset of the commands available in a mode; commands to which you do not have access are hidden.

The CLI prompt for each mode shows the full path down the mode hierarchy to the current mode. This helps you to determine where you are in the command mode hierarchy, and it can be an invaluable tool when you need to navigate through the hierarchy.

Object Commands

Four general commands are available for object management:

- **create** *object*
- **delete** *object*
- **enter** *object*
- **scope** *object*

You can use the **scope** command with any managed object, whether a permanent object or a user-instantiated object. The other commands allow you to create and manage user-instantiated objects. For every **create** *object* command, a corresponding **delete** *object* and **enter** *object* command exists.

In the management of user-instantiated objects, the behavior of these commands depends on whether the object exists, as described in the following tables:

Table 1: Command behavior if the object does not exist

Command	Behavior
create <i>object</i>	The object is created and its configuration mode, if applicable, is entered.
delete <i>object</i>	An error message is generated.
enter <i>object</i>	The object is created and its configuration mode, if applicable, is entered.
scope <i>object</i>	An error message is generated.

Table 2: Command behavior if the object exists

Command	Behavior
create <i>object</i>	An error message is generated.
delete <i>object</i>	The object is deleted.
enter <i>object</i>	The configuration mode, if applicable, of the object is entered.
scope <i>object</i>	The configuration mode of the object is entered.

Complete a Command

You can use the Tab key in any mode to complete a command. Partially typing a command name and pressing Tab causes the command to be displayed in full or to the point where another keyword must be chosen or an argument value must be entered.

Command History

The CLI stores all commands used in the current session. You can step through the previously used commands by using the Up Arrow or Down Arrow keys. The Up Arrow key steps to the previous command in the history, and the Down Arrow key steps to the next command in the history. If you get to the end of the history, pressing the Down Arrow key does nothing.

All commands in the history can be entered again by simply stepping through the history to recall the desired command and pressing Enter. The command is entered as if you had manually typed it. You can also recall a command and change it before you press Enter.

Committing, Discarding, and Viewing Pending Commands

When you enter a configuration command in the CLI, the command is not applied until you enter the **commit-buffer** command. Until committed, a configuration command is pending and can be discarded by entering a **discard-buffer** command.

You can accumulate pending changes in multiple command modes and apply them together with a single **commit-buffer** command. You can view the pending commands by entering the **show configuration pending** command in any command mode.

**Note**

Committing multiple commands together is not an atomic operation. If any command fails, the successful commands are applied despite the failure. Failed commands are reported in an error message.

While any commands are pending, an asterisk (*) appears before the command prompt. The asterisk disappears when you enter the **commit-buffer** command.

The following example shows how the prompts change during the command entry process:

```
UCSC# connect policy-mgr
UCSC(policy-mgr)# scope domain-group
UCSC(policy-mgr) /domain-group # create domain-group 12
UCSC(policy-mgr) /domain-group* # commit-buffer
UCSC(policy-mgr) /domain-group #
```

Online Help for the CLI

At any time, you can type the ? character to display the options available at the current state of the command syntax.

If you have not typed anything at the prompt, typing ? lists all available commands for the mode you are in. If you have partially typed a command, typing ? lists all available keywords and arguments available at your current position in the command syntax.

Logging into and out of the Cisco UCS Central GUI

Logging into the Cisco UCS Central CLI

Procedure

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- Step 1** In an SSH or telnet client, connect to the IP address assigned to Cisco UCS Central.
 - Step 2** At the `login as:` prompt, enter your Cisco UCS Central username and press Enter.
 - Step 3** At the `Password:` prompt, enter your password and press Enter.
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Logging out of the Cisco UCS Central CLI

The Cisco UCS Central CLI clears the buffer of all uncommitted transactions when you exit.

Procedure

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- Step 1** At the prompt, type `exit` and press Enter.
 - Step 2** Continue to type `exit` and press Enter at each prompt until the window closes.
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Configuring Identifier Policies

Identifier Policies

Cisco UCS Central supports an identifier policy for the **root** domain group. The identifier policy defines the soak interval, which is the number of seconds Cisco UCS Central waits before reassigning a pool entity that has been released by the Cisco UCS domain to which it was assigned.

Configuring the Identifier Policy

Procedure

	Command or Action	Purpose
Step 1	UCSC# connect policy-mgr	Enters policy manager mode.
Step 2	UCSC(policy-mgr)# scope domain-group <i>domain-group</i>	Enters domain group root mode and (optionally) enters a domain group under the domain group root. To enter the domain group root mode, type / as the <i>domain-group</i> .
Step 3	UCSC(policy-mgr) /domain-group # scope identifier-policy	Enters the identifier policy mode.
Step 4	UCSC(policy-mgr) /domain-group/identifier-policy # set soak-interval <i>soak-time</i>	Specifies the soak interval for the identifier policy. Specify an integer between 0 and 86400.
Step 5	UCSC(policy-mgr) /domain-group/identifier-policy # commit-buffer	Commits the transaction to the system.

The following example shows how to configure identifier policy and specify soak interval:

```
UCSC # connect policy-mgr
UCSC(policy-mgr) # scope domain-group dg1
UCSC(policy-mgr) /domain-group # scope identifier-policy
UCSC(policy-mgr) /domain-group/identifier-policy # set soak-interval 30
UCSC(policy-mgr) /domain-group/identifier-policy # commit-buffer
UCSC(policy-mgr) /domain-group #
```

Viewing the Identifier Policy

Procedure

	Command or Action	Purpose
Step 1	UCSC# connect policy-mgr	Enters policy manager mode.
Step 2	UCSC(policy-mgr)# scope domain-group <i>domain-group</i>	Enters domain group root mode and (optionally) enters a domain group under the domain group root. To enter the domain group root mode, type / as the <i>domain-group</i> .
Step 3	UCSC(policy-mgr) /domain-group # scope identifier-policy	Enters the identifier policy mode.
Step 4	UCSC(policy-mgr) /domain-group/identifier-policy # show	Displays the identifier policy with soak interval.

The following example shows how to view the identifier policy:

```
UCSC # connect policy-mgr
UCSC(policy-mgr)# scope domain-group dg1
UCSC(policy-mgr) /domain-group # scope identifier-policy
UCSC(policy-mgr) /domain-group/identifier-policy # show
Identifier Policy:
  Soak interval in seconds
  -----
  30
UCSC(policy-mgr) /domain-group #
```