

## **Chassis Profiles**

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# **Chassis Profiles in Cisco UCS Manager**

A chassis profile defines the storage, firmware, and maintenance characteristics of a chassis. You can create a chassis profile for the Cisco UCS S3260 chassis. When a chassis profile is associated to a chassis, Cisco UCS Manager automatically configures the chassis to match the configuration specified in the chassis profile.



Important

At any given time, each S3260 chassis can be associated with only one chassis profile. Similarly, each chassis profile can be associated with only one S3260 chassis at a time.

A chassis profile includes the following information:

- Chassis definition—Defines the specific chassis to which the profile is assigned.
- Maintenance policy—Includes the maintenance policy to be applied to the profile.
- **Firmware specifications**—Defines the chassis firmware package that can be applied to a chassis through this profile.
- Disk zoning policy—Includes the zoning policy to be applied to the storage disks.
- Compute Connection policy Defines the data path between the primary, auxiliary SIOC, and server.

### **Guidelines and Recommendations for Chassis Profiles**

In addition to any guidelines or recommendations that are specific to the policies included in chassis profiles and chassis profile templates, such as the disk zoning policy, adhere to the following guidelines and recommendations that impact the ability to associate a chassis profile with a chassis:

- Each S3260 chassis can be associated with only one chassis profile. Similarly, each chassis profile can be associated with only one S3260 chassis at a time.
- Chassis profiles are supported only on the Cisco UCS S3260 chassis. The Cisco UCS 5108 blade server
  chassis does not support chassis profiles and cannot be associated to a chassis profile.
- For Cisco UCS S3260 chassis, S-Series server software bundles earlier than Cisco UCS Manager Release 3.1(2) are not supported.

# **Creating a Chassis Profile**

	Command or Action	Purpose
Step 1	UCS-A# scope org org-name	Enters organization mode for the specified organization. To enter the root organization mode, type / as the <i>org-name</i> .
Step 2	UCS-A /org # create chassis-profile profile-name instance	Creates the specified chassis profile instance and enters organization chassis profile mode. Enter a unique <i>profile-name</i> to identify this chassis profile.
		This name can be between 1 and 16 alphanumeric characters. You cannot use spaces or any special characters other than - (hyphen), _ (underscore), : (colon), and . (period), and you cannot change this name after the object is saved.
Step 3	(Optional) UCS-A /org/chassis-profile* # set descr description	Provides a description for the chassis profile.  Note  If your description includes spaces, special characters, or punctuation, you must begin and end your description with quotation marks. The quotation marks will not appear in the description field of any show command output.

	Command or Action	Purpose
Step 4	(Optional) UCS-A /org/chassis-profile* # set chassisfwpolicyname chassis-firmware-policy-name	Associates the specified chassis firmware policy with the chassis profile.
Step 5	(Optional) UCS-A /org/chassis-profile* # set chassis-profile-maint-policy policy-name	Associates the specified chassis maintenance policy with the chassis profile.
Step 6	(Optional) UCS-A /org/chassis-profile* # set user-label label-name	Specifies the user label associated with the chassis profile.
Step 7	(Optional) UCS-A /org/chassis-profile* # set src-templ-name source-chassis-profile-template-name	Binds the specified chassis profile template with the chassis profile.
Step 8	(Optional) UCS-A /org/chassis-profile* # set disk-zoning-policy disk-zoning-policy-name	Associates the specified disk zoning policy with the chassis profile.
Step 9	(Optional) UCS-A /org/chassis-profile* # set compute-conn-policy compute-conn-policy-name	
Step 10	(Optional) UCS-A /org/chassis-profile* # set sas-expander-configuration-policy sas-expander-configuration-policy-name	Associates the specified SAS expander configuration policy with the chassis profile.
Step 11	UCS-A/org/chassis-profile*# commit-buffer	Commits the transaction to the system configuration.

The following example shows how to create a chassis profile instance and commit the transaction:

```
UCS-A# scope org /
UCS-A /org* # create chassis-profile ChassisProfile1 instance
UCS-A /org/chassis-profile* # set descr "This is a chassis profile example."
UCS-A /org/chassis-profile* # set chassis-profile-maint-policy chassismaintpol4
UCS-A /org/chassis-profile* # set user-label mycplabel
UCS-A /org/chassis-profile* # set chassisfwpolicyname cfp1
UCS-A /org/chassis-profile* # set src-templ-name chassispt1
UCS-A /org/chassis-profile* # set disk-zoning-policy dzp1
UCS-A /org/chassis-profile* # set compute-conn-policy ccp1
UCS-A /org/chassis-profile* # set sas-expander-configuration-policy secp1
UCS-A /org/chassis-profile* # commit-buffer
UCS-A /org/chassis-profile #
```

#### What to do next

Associate the chassis profile with a S3260 chassis.

# **Renaming a Chassis Profile**

When you rename a chassis profile, the following occurs:

- Event logs and audit logs that reference the previous name for the chassis profile are retained under that name.
- A new audit record is created to log the rename operation.
- All records of faults against the chassis profile under its previous name are transferred to the new chassis profile name.



Note

You cannot rename a chassis profile with pending changes.

#### **Procedure**

	Command or Action	Purpose
Step 1	UCS-A# scope org org-name	Enters organization mode for the specified organization. To enter the root organization mode, type / as the <i>org-name</i> .
Step 2	UCS-A /org # scope chassis-profile profile-name	Enters organization chassis profile mode for the specified chassis profile.
Step 3	UCS-A /org/chassis-profile # rename-to new-profile-name	Renames the specified chassis profile.  This name can be between 1 and 16 alphanumeric characters. You cannot use spaces or any special characters other than - (hyphen), _ (underscore), : (colon), and . (period), and you cannot change this name after the object is saved.
		When you enter this command, you are warned that this is a standalone operation and that you may lose all uncommitted changes in this CLI session. Type <b>yes</b> to confirm that you want to continue.

#### **Example**

This example shows how to change the name of a chassis profile from CP5 to CP10 and commits the transaction:

```
UCS-A# scope org /
UCS-A /org # scope chassis-profile CP5
UCS-A /org/chassis-profile # rename-to CP10
Rename is a standalone operation. You may lose any uncommitted changes in this CLI session.
Do you want to continue? (yes/no): yes
```

The managed object in the current mode no longer exists. Changing to mode: /org UCS-A /org  $\mbox{\#}$ 

# **Deleting a Chassis Profile**

This procedure explains how to delete a chassis profile.

#### **Procedure**

	Command or Action	Purpose
Step 1	UCS-A# scope org org-name	Enters organization mode for the specified organization. To enter the root organization mode, type / as the <i>org-name</i> .
Step 2	UCS-A /org # delete chassis-profile profile-name	Deletes the specified chassis profile.
Step 3	UCS-A /org* # commit-buffer	Commits the transaction to the system configuration.

#### **Example**

This example shows how to delete a chassis profile ChasInst90 and commit the transaction:

```
UCS-A# scope org /
UCS-A /org delete chassis-profile ChasInst90
UCS-A /org* # commit-buffer
UCS-A /org #
```

# **Chassis Profile Association**

### **Associating a Chassis Profile with a Chassis**

Follow this procedure if you did not associate the chassis profile with a chassis when you created it, or to change the chassis with which a chassis profile is associated.

	Command or Action	Purpose
Step 1	UCS-A# scope org org-name	Enters organization mode for the specified organization. To enter the root organization mode, type / as the <i>org-name</i> .
Step 2	UCS-A /org # scope chassis-profile profile-name	Enters organization chassis profile mode for the specified chassis profile.

	Command or Action	Purpose
Step 3	UCS-A /org/chassis-profile # associate chassis chassis-id [restrict-migration]	Associates the chassis profile with a single chassis.
		Adding the optional <b>restrict-migration</b> keyword prevents the chassis profile from being migrated to another chassis.
Step 4	UCS-A /org/chassis-profile* # commit-buffer	Commits the transaction to the system configuration.

The following example associates the chassis profile named ChassisProf1 with chassis 1, and commits the transaction:

```
UCS-A# scope org /
UCS-A /org* # scope chassis-profile ChassisProf1
UCS-A /org/chassis-profile # associate chassis 1
UCS-A /org/chassis-profile* # commit-buffer
UCS-A /org/chassis-profile #
```

### **Disassociating a Chassis Profile from a Chassis**

This procedure covers disassociating a chassis profile from a chassis.



Note

When a chassis is disassociated from a chassis profile, effects of disk zoning policy will be still be persistent in the chassis.

	Command or Action	Purpose
Step 1	UCS-A# scope org org-name	Enters organization mode for the specified organization. To enter the root organization mode, type / as the <i>org-name</i> .
Step 2	UCS-A /org # scope chassis-profile profile-name	Enters organization chassis profile mode for the specified chassis profile.
Step 3	UCS-A /org/chassis-profile # disassociate	Disassociates the chassis profile from the chassis.
Step 4	UCS-A /org/chassis-profile* # commit-buffer	Commits the transaction to the system configuration.

The following example disassociates the chassis profile named ChassisProf1 from the chassis to which it was associated and commits the transaction:

```
UCS-A# scope org /
UCS-A /org* # scope chassis-profile ChassisProf1
UCS-A /org/chassis-profile # disassociate
UCS-A /org/chassis-profile* # commit-buffer
UCS-A /org/chassis-profile #
```

# **Chassis Profile Template**

### **Creating a Chassis Profile Template**

	Command or Action	Purpose
Step 1	UCS-A# scope org org-name	Enters the organization mode for the specified organization. To enter the root organization mode, enter / as the <i>org-name</i> .
Step 2	UCS-A /org # create chassis-profile profile-name {initial-template   updating-template}	Creates the specified chassis profile template and enters organization chassis profile mode. Enter a unique <i>profile-name</i> to identify this chassis profile template.
		This name can be between 1 and 16 alphanumeric characters. You cannot use spaces or any special characters other than - (hyphen), _ (underscore), : (colon), and . (period), and you cannot change this name after the object is saved.
		Chassis profile template types are:
		• initial-template—Instances will not automatically update if this template is updated.
		• updating-template—Instances will automatically update if this template is updated.
Step 3	(Optional) UCS-A /org/chassis-profile* # set descr description	Provides a description for the chassis profile template.

	Command or Action	Purpose
		Note  If your description includes spaces, special characters, or punctuation, you must begin and end your description with quotation marks. The quotation marks will not appear in the description field of any show command output.
Step 4	UCS-A /org/chassis-profile* # set chassisfwpolicyname chassis-firmware-policy-name	Associates the specified chassis firmware policy with the chassis profile template.
Step 5	UCS-A /org/chassis-profile* # set chassis-profile-maint-policy policy-name	Associates the specified chassis maintenance policy with the chassis profile template.
Step 6	UCS-A /org/chassis-profile* # set user-label label-name	Specifies the user label associated with the chassis profile template.
Step 7	UCS-A /org/chassis-profile* # set src-templ-name source-chassis-profile-template-name	Binds the specified chassis profile template with the chassis profile.
Step 8	UCS-A /org/chassis-profile* # set disk-zoning-policy disk-zoning-policy-name	Associates the specified disk zoning policy with the chassis profile template.
Step 9	UCS-A /org/chassis-profile* # set compute-conn-policy compute-conn-policy-name	Associates the specified compute conn policy with the chassis profile template.
Step 10	UCS-A /org/chassis-profile*# commit-buffer	Commits the transaction to the system configuration.

The following example shows how to create a chassis profile template and commit the transaction:

```
UCS-A# scope org /

UCS-A /org* # create chassis-profile ChassisProTemp1 updating-template

UCS-A /org/chassis-profile* # set descr "This is a chassis profile template example."

UCS-A /org/chassis-profile* # set chassis-profile-maint-policy chassismaintpol2

UCS-A /org/chassis-profile* # set user-label mycptlabel

UCS-A /org/chassis-profile* # set chassisfwpolicyname cptf1

UCS-A /org/chassis-profile* # set src-templ-name chassispt1

UCS-A /org/chassis-profile* # set disk-zoning-policy dzp1

UCS-A /org/chassis-profile* # set compute-conn-policy ccp1

UCS-A /org/chassis-profile* # commit-buffer

UCS-A /org/chassis-profile #
```

#### What to do next

Create a chassis profile instance from the chassis profile template.

### **Creating a Chassis Profile Instance from a Chassis Profile Template**

#### Before you begin

Verify that there is a chassis profile template from which to create a chassis profile instance.

#### **Procedure**

	Command or Action	Purpose
Step 1	UCSC(resource-mgr)# scope org org-name	Enters organization mode for the specified organization. To enter the root organization mode, type / as the <i>org-name</i> .
Step 2	UCSC(resource-mgr) /org # create chassis-profile profile-name instance	Creates the specified chassis profile instance and enters organization chassis profile mode.  Enter a unique <i>profile-name</i> to identify this chassis profile.
		This name can be between 1 and 16 alphanumeric characters. You cannot use spaces or any special characters other than - (hyphen), _ (underscore), : (colon), and . (period), and you cannot change this name after the object is saved.
Step 3	UCSC(resource-mgr) /org/chassis-profile* # set src-templ-name profile-name	Specifies the source chassis profile template to apply to the chassis profile instance. All configuration settings from the chassis profile template will be applied to the chassis profile instance.
Step 4	UCSC(resource-mgr) /org/chassis-profile* # commit-buffer	Commits the transaction to the system configuration.

#### **Example**

The following example creates a chassis profile instance named ChassisProf02, applies the chassis profile template named ChassisProfTemp2, and commits the transaction:

```
UCSC(resource-mgr) # scope org /
UCSC(resource-mgr) /org* # create chassis-profile ChassisProf02 instance
UCSC(resource-mgr) /org/chassis-profile* # set src-templ-name ChassisProfTemp2
UCSC(resource-mgr) /org/chassis-profile* # commit-buffer
UCSC(resource-mgr) /org/chassis-profile #
```

#### What to do next

Associate the chassis profile to a chassis.

### **Binding a Chassis Profile to a Chassis Profile Template**

You can bind a chassis profile to a chassis profile template. When you bind the chassis profile to a template, Cisco UCS Manager configures the chassis profile with the values defined in the chassis profile template. If the existing chassis profile configuration does not match the template, Cisco UCS Manager reconfigures the chassis profile. You can only change the configuration of a bound chassis profile through the associated template.

#### **Procedure**

	Command or Action	Purpose
Step 1	UCS-A# scope org org-name	Enters organization mode for the specified organization. To enter the root organization mode, type / as the <i>org-name</i> .
Step 2	UCS-A /org # scope chassis-profile profile-name	Enters organization chassis profile mode for the specified chassis profile.
Step 3	UCS-A /org/chassis-profile # set src-templ-namechassis-profile-template-name	Binds the chassis profile to the specified chassis profile template.
Step 4	UCS-A /org/chassis-profile* # commit-buffer	Commits the transaction to the system configuration.

#### **Example**

The following example binds the chassis profile named ChassisProf1 to ChassisProfileTemplate1 and commits the transaction:

```
UCS-A# scope org
UCS-A /org # scope chassis-profile ChassisProf1
UCS-A /org/chassis-profile # set src-templ-name ChassisProfileTemplate1
UCS-A /org/chassis-profile* # commit-buffer
UCS-A /org/chassis-profile #
```

### **Unbinding a Chassis Profile from a Chassis Profile Template**

To unbind a chassis profile from a chassis profile template, bind the chassis profile to an empty value (quotes without space).

	Command or Action	Purpose
Step 1	UCSC# scope org org-name	Enters organization mode for the specified organization. To enter the root organization mode, type / as the <i>org-name</i> .
Step 2	UCSC /org # scope chassis-profile profile-name	Enters organization chassis profile mode for the specified chassis profile.

	Command or Action	Purpose
Step 3	UCSC /org/chassis-profile # set src-templ-name ''''	Unbinds the chassis profile from the chassis profile template.
Step 4	UCSC /org/chassis-profile* # commit-buffer	Commits the transaction to the system configuration.

The following example unbinds the chassis profile named ChassisProf1 and commits the transaction:

```
UCSC# scope org
UCSC /org # scope chassis-profile ChassisProf1
UCSC /org/chassis-profile # set src-templ-name ""
UCSC /org/chassis-profile* # commit-buffer
UCSC /org/chassis-profile #
```

# **Maintenance Policy**

# **Creating a Chassis Profile Maintenance Policy**

	Command or Action	Purpose
Step 1	UCS-A# scope org org-name	Enters organization mode for the specified organization. To enter the root organization mode, type / as the <i>org-name</i> .
Step 2	UCS-A /org # create chassis-profile-maint-policy policy-name	Creates the specified maintenance policy and enters maintenance policy mode.
Step 3	UCS-A /org/chassis-profile-maint-policy* # set reboot-policy user-ack	When a policy is associated with a chassis, the chassis needs to be re-acknowledged to complete the association. The user must explicitly acknowledge the changes by using the <b>apply pending-changes</b> command before changes are applied.
Step 4	(Optional) UCS-A /org/chassis-profile-maint-policy* # set descr description	A description of the policy. Cisco recommends including information about where and when to use the policy.
Step 5	(Optional) UCS-A /org/chassis-profile-maint-policy* # set policy-owner global   local	Specifies the owner for the maintenance policy.  • global - The ownership of the global policy remains with Cisco UCS Central, and you cannot make any changes to the policy ownership using Cisco UCS Manager. You

	Command or Action	Purpose
		can associate global policies with chassis in one or more registered Cisco UCS domains.  • local - You can only associate chassis in the same domain local policies.
Step 6	UCS-A /org/maint-policy #* commit-buffer	Commits the transaction to the system configuration.

The following example creates a maintenance policy called maintenance, and commits the transaction:

```
UCS-A# scope org /
UCS-A /org # create chassis-profile-maint-policy maintenance
UCS-A /org/chassis-profile-maint-policy* # set reboot-policy user-ack
UCS-A /org/chassis-profile-maint-policy* # commit-buffer
UCS-A /org/maint-policy #
```

# Configuring the Maintenance Policy for a Chassis Profile/Chassis Profile Template

#### **Procedure**

	Command or Action	Purpose
Step 1	UCS-A# scope org org-name	Enters organization mode for the specified organization. To enter the root organization mode, type / as the <i>org-name</i> .
Step 2	UCS-A /org # scope chassis-profile profile-name template-name	Enters organization chassis profile/chassis profile template mode for the specified chassis profile//chassis profile template.
Step 3	UCS-A /org/chassis-profile # set chassis-profile-maint-policy maintenance-policy-name	Associates the specified maintenance policy with the chassis profile//chassis profile template.  Use an existing maintenance policy name or enter a new policy.
Step 4	UCS-A /org/chassis-profile* # commit-buffer	Commits the transaction to the system configuration.

#### **Example**

The following example shows how to associate a maintenance policy with a chassis profile and commit the transaction:

```
UCS-A# scope org
UCS-A /org # scope chassis-profile ChassisProfile1
UCS-A /org/chassis-profile # set chassis-profile-maint-policy default
UCS-A /org/chassis-profile* # commit-buffer
UCS-A /org/chassis-profile #
```

# **Compute Connection Policy**

Compute Connection Policy is used to store the user configuration of the server SIOC connectivity. The configuration settings are done using the property **Server SIOC Connectivity**, which can be set to:

- **single-server-single-sioc** (default) The data path is configured through one SIOC when the chassis has single server and single SIOC or dual server and dual SIOCs.
- **single-server-dual-sioc** When enabled, you can configure the data path through both the primary and auxiliary SIOCs when the chassis has single server and dual SIOCs. See Server SIOC Connectivity Functionality for more details.

### **Creating Compute Conn Policy**

	Command or Action	Purpose
Step 1	UCS-A# scope org	Enters the root organization mode.
Step 2	UCS-A /org # create compute-conn-policy compute-conn-policy-name	Creates the specified compute conn policy.
Step 3	(Optional) UCS-A /org/compute-conn-policy*	Provides a description for the policy.
	# set descr description	Note  If your description includes spaces, special characters, or punctuation, you must begin and end your description with quotation marks. The quotation marks will not appear in the description field of any show command output.
Step 4	UCS-A /org/compute-conn-policy* # set server-sioc-connectivity {single-server-dual-sioc   single-server-single-sioc	• single-server-single-sioc (default) - The data path is configured through one SIOC when the chassis has single server and single SIOC or dual server and dual SIOCs.      • single-server-dual-sioc - When enabled, you can configure the data path through both the primary and auxiliary SIOCs when the chassis has single server and dual

	Command or Action	Purpose
		SIOCs. See Server SIOC Connectivity Functionality for more details.
Step 5	UCS-A /org/compute-conn-policy # commit-buffer	Commits the transaction to the system configuration.

```
UCS-A# scope org
UCS-A /org # create compute-conn-policy ccptest
UCS-A /org/compute-conn-policy* # set descr "This is an example policy."
UCS-A /org/compute-conn-policy* # set server-sioc-connectivity single-server-dual-sioc
UCS-A /org/compute-conn-policy* # commit-buffer
UCS-A /org/compute-conn-policy #
```

## **Associating a Compute Conn Policy to Chassis Profile**

	Command or Action	Purpose
Step 1	UCS-A# scope org	Enters the root organization mode.
Step 2	UCS-A /org# scope chassis_profile chassis-profile-name	Enters the chassis profile mode.
Step 3	UCS-A /org/chassis-profile# set compute-conn-policy compute-conn-policy-name	Associates the specified compute conn policy to the chassis profile.
Step 4	UCS-A /org/chassis-profile# commit-buffer	Commits the transaction to the system configuration.
Step 5	UCS-A /org/chassis-profile# apply pending-changes immediate	Acknowledges the pending changes and triggers profile association.
		Note Any change to Compute Connection Policy settings raises a pending-event. Chassis profile association starts automatically only after you acknowledge the pending-event.
Step 6	UCS-A /org/chassis-profile# commit-buffer	Commits the transaction to the system configuration.

```
UCS-A# scope org
UCS-A /org # scope chassis-profile chassisprofile1
UCS-A /org/chassis-profile # set compute-conn-policy compconpolicy1
UCS-A /org/chassis-profile* # commit-buffer
UCS-A /org/chassis-profile # apply pending-changes immediate
UCS-A /org/chassis-profile* # commit-buffer
```

Associating a Compute Conn Policy to Chassis Profile