



Registering Cisco UCS Domains with Cisco UCS Central

This chapter includes the following sections:

- [Registration of Cisco UCS Domains, page 1](#)
- [Policy Resolution between Cisco UCS Manager and Cisco UCS Central, page 2](#)
- [Registering a Cisco UCS Domain with Cisco UCS Central, page 3](#)
- [Configuring Policy Resolution between Cisco UCS Manager and Cisco UCS Central, page 4](#)
- [Setting Cisco UCS Central Registration Properties in Cisco UCS Manager, page 6](#)
- [Unregistering a Cisco UCS Domain from Cisco UCS Central, page 7](#)

Registration of Cisco UCS Domains

You can have Cisco UCS Central manage some or all of the Cisco UCS domains in your data center.

If you want to have Cisco UCS Central manage a Cisco UCS domain, you need to register that domain. When you register, you need to choose which types of policies and other configurations, such as backups and firmware, will be managed by Cisco UCS Central and which by Cisco UCS Manager. You can have Cisco UCS Central manage the same types of policies and configurations for all registered Cisco UCS domains or you can choose to have different settings for each registered Cisco UCS domain.

Before you register a Cisco UCS domain with Cisco UCS Central, do the following:

- Configure an NTP server and the correct time zone in both Cisco UCS Manager and Cisco UCS Central to ensure that they are in sync. If the time and date in the Cisco UCS domain and Cisco UCS Central are out of sync, the registration might fail.
- Obtain the hostname or IP address of Cisco UCS Central
- Obtain the shared secret that you configured when you deployed Cisco UCS Central

Policy Resolution between Cisco UCS Manager and Cisco UCS Central

For each Cisco UCS domain that you register with Cisco UCS Central, you can choose which application will manage certain policies and configuration settings. This policy resolution does not have to be the same for every Cisco UCS domain that you register with the same Cisco UCS Central.

You have the following options for resolving these policies and configuration settings:

- **Local**—The policy or configuration is determined and managed by Cisco UCS Manager.
- **Global**—The policy or configuration is determined and managed by Cisco UCS Central.



Note

The policy resolution options in Cisco UCS Central are not supported on all versions of Cisco UCS Manager. If your Cisco UCS Manager version is earlier than the earliest supported release, the policy resolution screen may display the value as global even if it is not applicable.

The following table contains a list of the policies and configuration settings that you can choose to have managed by either Cisco UCS Manager or Cisco UCS Central:

Name	Earliest Supported Release	Description
Infrastructure & Catalog Firmware	2.1(2)	Determines whether the Capability Catalog and infrastructure firmware policy are defined locally in Cisco UCS Manager or come from Cisco UCS Central.
Time Zone Management	2.1(2)	Determines whether the time zone and NTP server settings are defined locally in Cisco UCS Manager or comes from Cisco UCS Central.
Communication Services	2.1(2)	Determines whether HTTP, CIM XML, Telnet, SNMP, web session limits, and Management Interfaces Monitoring Policy settings are defined locally in Cisco UCS Manager or in Cisco UCS Central.
Global Fault Policy	2.1(2)	Determines whether the Global Fault Policy is defined locally in Cisco UCS Manager or in Cisco UCS Central.
User Management	2.1(2)	Determines whether authentication and native domains, LDAP, RADIUS, TACACS+, trusted points, locales, and user roles are defined locally in Cisco UCS Manager or in Cisco UCS Central.
DNS Management	2.1(2)	Determines whether DNS servers are defined locally in Cisco UCS Manager or in Cisco UCS Central.

Name	Earliest Supported Release	Description
Backup & Export Policies	2.1(2)	Determines whether the Full State Backup Policy and All Configuration Export Policy are defined locally in Cisco UCS Manager or in Cisco UCS Central.
Monitoring	2.1(2)	Determines whether Call Home, Syslog, and TFTP Core Exporter settings are defined locally in Cisco UCS Manager or in Cisco UCS Central.
SEL Policy	2.1(2)	Determines whether the SEL Policy is defined locally in Cisco UCS Manager or in Cisco UCS Central.
Power Allocation Policy	2.1(2)	Determines whether the Power Allocation Policy is defined locally in Cisco UCS Manager or in Cisco UCS Central.
Power Policy	2.1(2)	Determines whether the Power Policy is defined locally in Cisco UCS Manager or in Cisco UCS Central.
Equipment Policy	2.2(7)	Determines whether the Equipment Policy is defined locally in Cisco UCS Manager or in Cisco UCS Central.
Port Configuration	2.2(7)	Determines whether port configuration is defined locally in Cisco UCS Manager or in Cisco UCS Central.
Quality of Service (QoS) Configuration	2.2(7)	Determines whether QoS configuration is defined locally in Cisco UCS Manager or in Cisco UCS Central.

Registering a Cisco UCS Domain with Cisco UCS Central

Before You Begin

Configure an NTP server and the correct time zone in both Cisco UCS Manager and Cisco UCS Central to ensure that they are in sync. If the time and date in the Cisco UCS domain and Cisco UCS Central are out of sync, the registration might fail.

Procedure

	Command or Action	Purpose
Step 1	UCS-A# scope system	Enters system mode.
Step 2	UCS-A/system # create control-ep policy <i>ucs-central</i>	Creates the policy required to register the Cisco UCS Domain with Cisco UCS Central. <i>ucs-central</i> can be the hostname or IP address of the virtual machine where Cisco UCS Central is deployed.

	Command or Action	Purpose
		Note If you use a hostname rather than an IPv4 or IPv6 address, you must configure a DNS server. If the Cisco UCS domain is not registered with Cisco UCS Central or DNS management is set to local , configure a DNS server in Cisco UCS Manager. If the Cisco UCS domain is registered with Cisco UCS Central and DNS management is set to global , configure a DNS server in Cisco UCS Central.
Step 3	Shared Secret for Registration: <i>shared-secret</i>	Enter the shared secret (or password) that was configured when Cisco UCS Central was deployed.
Step 4	UCS-A/system/control-ep # commit-buffer	Commits the transaction to the system configuration.

The following example registers a Cisco UCS Domain with a Cisco UCS Central system at IP address 209.165.200.233, and commits the transaction:

```
UCS-A# scope system
UCS-A /system # create control-ep policy 209.165.200.233
Shared Secret for Registration: S3cretW0rd!
UCS-A /system/control-ep* # commit-buffer
UCS-A /system/control-ep #
```

What to Do Next

Configure policy resolution between Cisco UCS Manager and Cisco UCS Central.

Configuring Policy Resolution between Cisco UCS Manager and Cisco UCS Central

Before You Begin

You must register the Cisco UCS Domain with Cisco UCS Central before you can configure policy resolution.

Procedure

	Command or Action	Purpose
Step 1	UCS-A# scope system	Enters system mode.
Step 2	UCS-A/system # scope control-ep policy	Enters control-ep policy mode.
Step 3	UCS-A/system/control-ep # set backup-policy-ctrl source {local global}	Determines whether the Full State Backup Policy and All Configuration Export Policy are defined locally or in Cisco UCS Central.

	Command or Action	Purpose
Step 4	UCS-A/system/control-ep # set communication-policy-ctrl source {local global}	Determines whether HTTP, CIM XML, Telnet, SNMP, web session limits, and Management Interfaces Monitoring Policy settings are defined locally or in Cisco UCS Central.
Step 5	UCS-A/system/control-ep # set datetime-policy-ctrl source {local global}	Determines whether the date and time is defined locally or comes from Cisco UCS Central.
Step 6	UCS-A/system/control-ep # set dns-policy-ctrl source {local global}	Determines whether DNS servers are defined locally or in Cisco UCS Central.
Step 7	UCS-A/system/control-ep # set fault-policy-ctrl source {local global}	Determines whether the Global Fault Policy is defined locally or in Cisco UCS Central.
Step 8	UCS-A/system/control-ep # set infra-pack-ctrl source {local global}	Determines whether the Capability Catalog and infrastructure firmware policy are defined locally or come from Cisco UCS Central.
Step 9	UCS-A/system/control-ep # set mep-policy-ctrl source {local global}	Determines whether managed endpoints are defined locally or in Cisco UCS Central.
Step 10	UCS-A/system/control-ep # set monitoring-policy-ctrl source {local global}	Determines whether Call Home, Syslog, and TFTP Core Exporter settings are defined locally or in Cisco UCS Central.
Step 11	UCS-A/system/control-ep # set powermgmt-policy-ctrl source {local global}	Determines whether the power management is defined locally or in Cisco UCS Central.
Step 12	UCS-A/system/control-ep # set psu-policy-ctrl source {local global}	Determines whether power supply units are defined locally or in Cisco UCS Central.
Step 13	UCS-A/system/control-ep # set security-policy-ctrl source {local global}	Determines whether authentication and native domains, LDAP, RADIUS, TACACS+, trusted points, locales, and user roles are defined locally or in Cisco UCS Central.
Step 14	UCS-A/system/control-ep # commit-buffer	Commits the transaction to the system configuration.

The following example configures policy resolution for a Cisco UCS Domain that is registered with Cisco UCS Central and commits the transaction:

```
UCS-A# scope system
UCS-A /system # scope control-ep policy
UCS-A /system/control-ep* # set backup-policy-ctrl source global
UCS-A /system/control-ep* # set communication-policy-ctrl source local
UCS-A /system/control-ep* # set datetime-policy-ctrl source global
UCS-A /system/control-ep* # set dns-policy-ctrl source global
UCS-A /system/control-ep* # set fault-policy-ctrl source global
UCS-A /system/control-ep* # set infra-pack-ctrl source global
UCS-A /system/control-ep* # set mep-policy-ctrl source global
```

```

UCS-A /system/control-ep* # set monitoring-policy-ctrl source global
UCS-A /system/control-ep* # set powermgmt-policy-ctrl source global
UCS-A /system/control-ep* # set psu-policy-ctrl source local
UCS-A /system/control-ep* # set security-policy-ctrl source global
UCS-A /system/control-ep* # commit-buffer
UCS-A /system/control-ep #

```

Setting Cisco UCS Central Registration Properties in Cisco UCS Manager

Procedure

	Command or Action	Purpose
Step 1	UCS-A# scope system	Enters system mode.
Step 2	UCS-A /system # scope control-ep policy	Enters the registration policy.
Step 3	UCS-A /system/control-ep # set cleanupmode { }	<p>This can be one of the following:</p> <ul style="list-style-type: none"> • Localize Global—When a Cisco UCS domain is unregistered, all global policies in the Cisco UCS domain will be localized to Cisco UCS Manager. The policies remain in the Cisco UCS domain, policy ownership is now local to Cisco UCS Manager, and Cisco UCS Manager admin users can make changes. <p>Note If you reregister the Cisco UCS domain with Cisco UCS Central, there can be policy conflicts due to the policies existing both in Cisco UCS Central and in Cisco UCS Manager. Either delete the local policies, or set the local policies to global before you try to create and associate a global service profile.</p> <ul style="list-style-type: none"> • Deep Remove Global—This option should only be used after careful consideration. When a Cisco UCS domain is unregistered, all global policies in the Cisco UCS domain are removed. If there are global service profiles, they will now refer to Cisco UCS Manager local default policies, and one of the following occurs: <ul style="list-style-type: none"> ◦ If there are local default policies present, the server will reboot. ◦ If there are no local default policies, the service profile association fails with a configuration error. <p>Note The deep remove global cleanup mode does not remove global VSANs and VLANs when you unregister from Cisco UCS Central. Those must be removed manually if desired.</p>

	Command or Action	Purpose
Step 4	UCS-A /system/control-ep # set suspendstate on	Sets the suspend state. If set automatically, the Cisco UCS domain is temporarily removed from Cisco UCS Central, and all global policies revert to their local counterparts. All service profiles maintain their current identities. However, global pools are no longer visible and cannot be accessible by new service profiles. To turn off suspend state, you need to acknowledge the situation.
Step 5	UCS-A /system/control-ep # set ackstate acked	Acknowledges that inconsistencies exist between Cisco UCS Manager and Cisco UCS Central and that you are still willing to reconnect the Cisco UCS domain with Cisco UCS Central. This automatically turns off suspend state.
Step 6	UCS-A /system/control-ep # commit-buffer	Commits the transaction to the system configuration.

The following example shows how to change the Cisco UCS Central registration cleanup mode to deep-remove-global and commit the transaction:

```
UCS-A# scope system
UCS-A /system # scope control-ep policy
UCS-A /system/control-ep* # set cleanupmode deep-remove-global
UCS-A /system/control-ep* # commit-buffer
UCS-A /system/control-ep #
```

Unregistering a Cisco UCS Domain from Cisco UCS Central

When you unregister a Cisco UCS domain from Cisco UCS Central, Cisco UCS Manager no longer receives updates to global policies.

Procedure

	Command or Action	Purpose
Step 1	UCS-A# scope system	Enters system mode.
Step 2	UCS-A/system # delete control-ep policy	Deletes the policy and unregisters the Cisco UCS Domain from Cisco UCS Central.
Step 3	UCS-A/system # commit-buffer	Commits the transaction to the system configuration.

The following example unregisters a Cisco UCS Domain from Cisco UCS Central and commits the transaction:

```
UCS-A# scope system
UCS-A /system # delete control-ep policy
UCS-A /system* # commit-buffer
UCS-A /system #
```

