



Cisco UCS Manager Plug-in for VMware vSphere HTML Client User Guide, Release 4.x

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CHAPTER 1

Overview

This chapter includes the following sections:

- [About the Cisco UCS Manager Plug-In for vSphere HTML Client, on page 1](#)
- [System Requirements, on page 2](#)

About the Cisco UCS Manager Plug-In for vSphere HTML Client

Cisco UCS Manager plug-in is a VMware vSphere HTML client plug-in, which enables virtualization administrator to view, manage and monitor the Cisco UCS physical infrastructure. The plug-in provides a physical view of the UCS hardware inventory on the HTML client. You can perform the following tasks using the plug-in:

- Register multiple VMware vCenter servers
- View support bundle logs - VMware vCenter server and appliance logs
- Add or delete custom faults
- Proactive HA - assess the health of the server running the ESXi host
- Register and unregister proactive HA
- View Cisco UCS physical hierarchy
- View inventory, installed firmware, faults, power and temperature statistics
- Map the ESXi host to the physical server
- Manage firmware for B and C series servers
- View VIF paths for servers
- Launch the Cisco UCS Manager GUI
- Launch the KVM consoles of UCS servers
- Switch the existing state of the locator LEDs

System Requirements

Ensure that the system meets the following requirements:

- 4 vCPUs and 8GB memory
- 4GB datastore thin provisioned / 100GB datastore thick provisioned
- Single static IP address details on management network
- VMware vCenter 7.0u1 or higher

Please check [VMware vSphere HTML Client Releases, on page 2](#).

VMware vSphere HTML Client Releases

Cisco UCS Manager plug-in is compatible with the following vSphere HTML Client releases:

| VMware vSphere HTML Client Version | Cisco UCS Manager Plugin for VMware vSphere Version |
|------------------------------------|-----------------------------------------------------|
| 7.0 | 3.0(4), 3.0(5), 3.0(6) |
| 7.0u1, 7.0u2 | 3.0(5), 3.0(6), 4.0.0 |
| 7.0u3 | 3.0(5), 3.0(6), 4.0.0 |
| 8.0, 8.0u1, 8.0u2 | 4.0.0 |



Note VMware vSphere HTML Client Version 7.0u3 is supported partially with Cisco UCS Manager plug-in release 3.0(6) version.

Supported Cisco UCS Manager Releases

Cisco UCS Manager plug-in is compatible with the following UCS Manager releases:

- Release 3.2 and later



CHAPTER 2

Installing the Plug-in OVA and Registering the VMware vCenter Servers

- [User Privileges, on page 3](#)
- [Importing the IdenTrust Certificate Chain, on page 3](#)
- [Deploying and Installing the Plug-in OVA Package, on page 4](#)
- [Adding and Registering the VMware vCenter Servers, on page 6](#)
- [Viewing the Registered VMware vCenter Servers, on page 6](#)
- [Configuring the Registered VMware vCenter Servers, on page 7](#)
- [Upgrading Cisco UCS Manager Plug-In Appliance for VMware vCenter, on page 9](#)
- [Registering the UCS Domains, on page 10](#)

User Privileges

Cisco UCS Manager Plug-In for vSphere HTML client enables you to register and manage VMware vCenter servers. When you install Cisco UCS Manager plug-in, register the VMware vCenter servers individually using UCS Manager user account. Depending on the UCS Manager user privileges, you used while registering the VMware vCenter servers you can perform the actions. Also, each plug-in action supports the same privileges as Cisco UCS Manager.

For example, if you registered a VMware vCenter servers with admin privileges, you can perform actions on that server using the plug-in. You can perform various actions on the servers, firmware, service profiles, and service profile templates.

When you log in to the Cisco UCS Manager plug-in, you can view the VMware vCenter servers that you have registered. You cannot edit or unregister the VMware vCenter servers registered by users with different vCenter roles or by the users who registered the VMware vCenter server. Only a user with same vCenter role and also has registered the VMware vCenter server, has the privilege to edit or unregister the plug-in.

Importing the IdenTrust Certificate Chain

The Cisco UCSM Plugin OVA file is signed with an IdenTrust CA certificate, which is not included in VMware's default truststore. As a result, the **Review details** page in the **Deploy OVF Template** wizard indicates that you are using an invalid certificate while completing the wizard.

You can prevent this by importing the IdenTrust certificate chain to the host or cluster on which you want to deploy the OVA file.

Procedure

- Step 1** On the VMware ESXi host or cluster where your virtual appliance will reside, download `trustidevcodesigning4.tar.gz` from the same location that Cisco specified to download the Cisco UCSM Plugin OVA file.
- Step 2** Unzip this file.
- Step 3** Log in to the vSphere Web Client.
- Step 4** Select **Administration > Certificates > Certificate Management**.
- Step 5** In the **Trusted Root Certificates** field, click **Add**.
- Step 6** In the **Add Trusted Root** dialog box, click **Browse**.
- Step 7** Navigate to and select the certificate chain you downloaded in Step 1 (**trustidevcodesigning4.pem**). Click **Open**.
- Step 8** Check the **Start Root certificate push to vCenter Hosts** check box. Click **Add**.

A message indicates that the certificate chain was successfully imported.

When you complete the **Deploy OVF Template** wizard, the **Publisher** field in the **Review details** page indicates that you are using a trusted certificate.

Deploying and Installing the Plug-in OVA Package

Before you begin

- Plug-in OVA package is hosted on HTTP or HTTPS server. Ensure that the HTTP or HTTPS URL of the plug-in OVA package is reachable from the vCenter server.
- Ensure that you have imported the IdenTrust Certificate Chain before you install the OVA package.
- Close all the HTML client browser sessions.
- The default username is admin.

Procedure

- Step 1** On the Cisco.com download site for Cisco UCS Management Partner Ecosystem Software, download the Cisco UCS Manager plug-in OVA package.
The files are stored in your local download folder.
- Step 2** Log in to the vCenter server and right-click on any inventory object and select **Deploy OVF Template**.
Inventory object is a valid parent object of a virtual machine, such as:
 - Data center

- Folder
- Cluster
- Resource pool or host

The **Deploy OVF Template** wizard is displayed.

Step 3 Specify the location of the OVA template on the **Select an OVF template** page and click **Next**.

Step 4 Enter a unique name for the virtual machine and select a deployment location on the next page. Click **Next**.

Step 5 Select a resource to run the deployed OVA template. Click **Next**.

Step 6 Verify the OVA template details.

In the **Review details** window, the following message is displayed:

The certificate is not trusted.

You can choose to validate the certificate or ignore the message.

To validate the certificate, see [Importing the IdenTrust Certificate Chain, on page 3](#).

To ignore the certificate, click the **Ignore** link, next to the above message.

Step 7 Select a storage location. Click **Next**.

Step 8 Select a source network and map it to a destination network. Click **Next**.

Customize template page is displayed.

Step 9 Enter the networking information and the user credentials.

a) Enter the required details for the following fields:

- IP address
- Netmask
- Gateway
- DNS Server
- NTP Server
- Hostname

b) Enter the username as admin and password to access the Cisco UCS Manager plug-in appliance.

c) Click Next.

Step 10 Review the information on the **Ready to complete** page and click **Finish**.

After the OVA package is deployed on the vCenter server, reboot the server to complete the configuration and enable access to the plug-in.

What to do next

Access the Cisco UCS Manager plug-in appliance using the `https://<fqdn>` or `https://<server-IP>` URL.

Provide the admin credentials configured in the OVA package and register the VMware vCenter servers.

Adding and Registering the VMware vCenter Servers

Before you begin

- The default username is admin.

Procedure

Step 1 Login to **Cisco UCS Manager Plug-in Appliance** Web UI as admin user and enter the password.

Step 2 Click **Register**.

The **Add VMware vCenter Servers** pop-up window is displayed.

Step 3 Enter the required information in the **Add VMware vCenter Servers** pop-up window.

a) Enter the following details:

| Field | Description |
|----------------|-----------------------------------------------------------|
| FQDN/Server IP | FQDN or Server IP of the VMware vCenter server. |
| Port | The port to use for communication. The default is 443. |
| Username | Enter the user name for the VMware vCenter server. |
| Password | Enter the password for the VMware vCenter server. |

b) (Optional) Select the **Proactive HA** checkbox to enable Proactive HA in the server.

c) (Optional) Enable the **Use same credentials for all vCenter Servers** checkbox to apply the same user credentials for all the VMware vCenter servers.

d) (Optional) Click **Add** to add the details of another VMware vCenter server.

Step 4 Click **Next**.

Step 5 Review the VMware vCenter server details displayed in the **Summary** page. Click **Register**.

On successful registration, the VMware vCenter server details are displayed in the **Registered VMware vCenter Servers** table.

The list of registered VMware vCenter servers is displayed in the **Registered VMware vCenter Servers** table.

Viewing the Registered VMware vCenter Servers

Before you begin

- The default username is admin.

Procedure

- Step 1** Login to **Cisco UCS Manager Plug-in Appliance** Web UI as admin user and enter the password.
- Step 2** The list of registered VMware vCenter servers is displayed in the **Registered VMware vCenter Servers** table. The following details are displayed for the VMware vCenter servers.

| Field | Description |
|--------------------|---------------------------------------------------------------------------------------------------------------------------|
| FQDN/Server IP | Server IP / FQDN of the VMware vCenter server. |
| Port | The port used for communication. The default value is 443. |
| Username | User name that is used to access the VMware vCenter server. |
| Version | VMware vCenter release version. |
| Plug-in Version | UCS Manager plug-in release version. |
| Plug-in Status | Connection status of the VMware vCenter server with the UCS Manager plug-in. |
| ProactiveHA Status | Status of the Proactive HA feature for the VMware vCenter server. By default, the ProactiveHA feature is disabled. |

Configuring the Registered VMware vCenter Servers

1. Login to the **Cisco UCS Manager Plug-in Appliance** Web UI and enter your user credentials.
2. Identify the VMware vCenter server in the **Registered VMware vCenter Servers** table.
3. Click on the 3 dots displayed near the respective VMware vCenter server in the table.
4. You can perform the following actions on the VMware vCenter server:

| Option | Description |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Update | <p>Allows you to upgrade the selected plug-in with the latest version.</p> <p>The Upgrade Plug-in pop-up window is displayed with the message:</p> <p><i>Are you sure you want to upgrade Plug-in?</i></p> <p>Click Update.</p> <p>If there is no upgrade version available, then the message is displayed that the plug-in is already registered on the VMware vCenter.</p> |
| Unregister | <p>Note Before you unregister, perform the following step if Proactive HA Provider is enabled:</p> <ul style="list-style-type: none"> • Disable the HA provider and turn off Proactive HA from vSphere Availability in the vCenter Cluster Configure page. <p>The Unregister option allows you to unregister the plug-in.</p> <p>The Unregister Plug-in pop-up window is displayed with the message <i>Are you sure you want to unregister?</i></p> <p>Click Yes to unregister the plug-in.</p> |
| vCenter Log | <p>Allows you to view the logs of the VMware vCenter server.</p> <p>The support bundle window is displayed as a new tab on your web browser.</p> <p>Enter the VMware vCenter server root credentials in the support bundle window to authenticate and view the logs.</p> |
| Update Password | <p>Allows you to update the password of the vCenter server in the plug-in.</p> <p>The Update vCenter server password pop-up window is displayed with the following fields:</p> <ul style="list-style-type: none"> • Username • Password <p>Enter the username and new password. Click Update.</p> |

5. Click **Update All** to upgrade all the plug-in versions.

The **Upgrade All Plug-in** pop-up window is displayed with the following message: *Are you sure you want to upgrade all Plug-in(s)?*

Click **Update** to update the plug-in versions.

Downloading the Appliance Logs

Perform the following steps to download the appliance logs.

1. In the UCS Manager Plug-in Appliance home page, click the **Settings** icon.
2. Select **Appliance Log** from the drop-down list.

The UCS Manager plug-in appliance support bundle is downloaded on a new tab on your web browser. The support bundle is in `tar.gz` format.

Upgrading Cisco UCS Manager Plug-In Appliance for VMware vCenter

Perform the below steps to upgrade to Cisco UCS Manager plug-in appliance.

Before you begin

- Use an SSH client to access the UCS Manager plugin appliance virtual machine (VM).
- We recommend that you take a snapshot of the appliance VM before you choose to upgrade.

Procedure

- Step 1** Download the `ucsm-vcenter-plugin-4.0.0.xx.tar.gz` upgrade package.
 - Step 2** Copy the `ucsm-vcenter-plugin-4.0.0.xx.tar.gz` upgrade package to `/tmp` folder.
 - Step 3** From the SSH client, log into the UCS Manager plugin appliance VM.
 - Step 4** Run the following command to upgrade the plug-in appliance:

```
ucsm-plugin-upgrade /tmp/ucsm-vcenter-plugin-4.0.0.xx.tar.gz
```
 - Step 5** After the upgrade is completed, log into the UCS Manager plug-in appliance using the following link:

```
https://<UCSMpluginIP>:443
```

Log into the UCS Manager plug-in appliance Web UI and view the home page.
 - Step 6** Click **Update All** to upgrade the plug-in versions for all vCenter servers.
(Optional)
To update the plug-in version for a specific vCenter server, see [Configuring the Registered VMware vCenter Servers, on page 7](#).
-

Registering the UCS Domains

Using the vSphere HTML client, you can register the UCS domains. You can edit the details, unregister, and reregister the previously registered UCS domains.



Note If a UCS domain is registered with read-only privileges, you cannot perform actions related to the service profiles, service profile templates, and firmware management using the plug-in. Also, you cannot view or edit UCS domains registered by a different user unless you have admin privileges.

Procedure

Step 1 Launch the vSphere HTML client.

Step 2 In the **Shortcuts** tab, double-click **Cisco UCS Manager Plug-in**.
Cisco UCS Management Center view appears.

Step 3 Click **Register**.
Register UCS Domain dialog box appears.

Step 4 Enter the following:

- **UCS Hostname/IP**—IP address or the hostname of the UCS domain.

- **Username**—UCS domain username.

Note • For LDAP authentication, enter the username in the *ucs-domainname\username* format.

- RBAC supports LDAP, TACACS, RADIUS users.

- **Password**—UCS domain password.

- **Visible to All Users**—Whether to make this domain visible to all users

Step 5 Click **OK**.

Note You may be prompted to accept a certificate. Accept to continue registration.

UCS domain is registered and appears on the list of Registered UCS Domains.

Cisco UCS Management Center also provides the following options:

| Button | Description |
|------------|----------------------------------------|
| Unregister | Allows you to unregister a UCS domain. |
| Edit | Allows you to edit a UCS domain. |



CHAPTER 3

Viewing Information Using the Plug-in

This chapter includes the following sections:

- [Viewing the UCS Domain Details, on page 11](#)
- [Viewing the Chassis Details, on page 12](#)
- [Viewing the Fabric Interconnect Details, on page 13](#)
- [Viewing the Unmanaged Server Details, on page 14](#)
- [Viewing the Managed Server Details, on page 16](#)
- [Viewing the Fabric Extender Details, on page 17](#)
- [Viewing Firmware Packages, Tasks, and Host Firmware Details, on page 18](#)

Viewing the UCS Domain Details

This section describes step to view the details of the registered Cisco UCS domains using the Cisco UCS Manager plug-in.

Procedure

- Step 1** Launch the vSphere HTML client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS Manager plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click the domain for which you want view the details.
On the right pane of the window, you can view the following UCS Domain information:

| Name | Description |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Summary tab | The summary tab displays the following information: <ul style="list-style-type: none">• High level and system specific UCS domain information, such as number of managed servers and unmanaged servers, number of virtual machines, virtual IPv4 address and so on.• Faults section displays the number of faults categorized based on fault severity. |

| Name | Description |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Monitor tab | Displays faults' information. |
| Configure tab | <p>The Configure tab displays the following information:</p> <ul style="list-style-type: none"> • Service profiles, service profile templates, server pools, host firmware packages, firmware upload tasks, firmware package bundles and related information on their respective tabs. • Displays the following actions supported on the service profile tab: <ul style="list-style-type: none"> • Pending Activities • Manage Host Firmware Pack • Displays the following actions supported on the service profile template tab: <ul style="list-style-type: none"> • Manage Host Firmware Pack • Manage Server Pool • Create Service Profiles from Template • Displays the following actions supported on the firmware tab: <ul style="list-style-type: none"> • Modify Package Versions • Upload Firmware • Delete Upload Task • Delete Firmware Package |
| Equipments tab | Displays the chassis, rack mounts and fabric interconnects associated with the domain on their respective tabs. |

Viewing the Chassis Details

The following section explains how to view chassis related information using the Cisco UCS Manager plug-in.

Procedure

- Step 1** Launch the vSphere HTML Client.

- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click the domain for which you want to view the chassis details.
- Step 5** Click **Chassis**.
A list of all the chassis associated with the UCS domain appears.
- Step 6** Select a chassis from the list for which you want view the details.
On the right pane of the window, you can view the following chassis information:

| Name | Description |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Summary tab | The summary tab displays the following information: <ul style="list-style-type: none"> • High level chassis information and hardware specific information, such as overall status, number of managed and non-managed servers, number of virtual machines and so on. • Status grid for chassis having information about thermal, power and configuration state. • Number of faults categorized based on fault severity. |
| Monitor tab | Displays faults' information and power statistics. The Monitor tab displays the following information: <ul style="list-style-type: none"> • The associated PSUs and related information on the PSU tab. • The associated Input/output modules and related information on the IO Modules tab. • The fan modules and related information on the Fan tab. |
| Servers tab | Displays the managed and unmanaged servers, and the UCS domain with which the chassis is associated, on their respective tabs. |

Viewing the Fabric Interconnect Details

The following section explains how to view fabric interconnect related information using the Cisco UCS Manager plug-in.

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click the domain for which you want view the details.
- Step 5** Click **Fabric Interconnect**.
A list of all the fabric interconnect associated with the UCS domain appears.
- Step 6** Select a fabric interconnect from the list for which you want view the details.
In the right pane of the window, you can view the following fabric interconnect information:

| Name | Description |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Summary tab | The summary tab displays the following information: <ul style="list-style-type: none"> • Fabric interconnect specific information, such as a model, leadership, and so on. • Status section displays Ethernet or fabric connect mode, overall status, and so on. • Firmware section displays a kernel version, system version, bootloader version, and so on. • Faults section displays a number of faults categorized based on fault severity. |
| Monitor tab | Displays faults' information. The Monitor tab displays the following information: <ul style="list-style-type: none"> • The associated PSUs and related information on the PSU tab. • The fan modules and related information on the Fan tab. |
| More Objects tab | Displays the UCS domain with which the fabric interconnect is associated on their respective tabs. |

Viewing the Unmanaged Server Details

You can view the unmanaged server information for the C-Series servers under the rack mounts and the blade servers under the chassis. The following section explains how to view the unmanaged server related information using the Cisco UCS Manager plug-in for either rack mounts or chassis.

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click the domain for which you want view the details.
- Step 5** Click **Rack Mounts** or **Chassis**.
A list of all the rack mounts or chassis associated with the UCS domain appears.
- Step 6** Select a rack mount or chassis.
- Step 7** Click **Unmanaged Servers**.
A list of all the unmanaged servers associated with the rack mount or chassis appears.
- Step 8** Select a server from the list for which you want view the details.
In the right pane of the window, you can view the following server information:

| Name | Description |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Summary tab | <p>Displays the UCS server UUID, associated service profile, serial number, and information specific to hardware, such as a model, number of cores, processors, memory, and so on.</p> <p>It also has the following action buttons:</p> <ul style="list-style-type: none"> • Launch KVM - You can launch the KVM console by clicking on this button. • Launch UCSM - You can launch the Cisco UCS Manager GUI by clicking on this button. • Turn Locator LED On - Switches on the locator LED. • Turn Locator LED Off - Switches off the locator LED. |
| Monitor tab | <p>Displays faults' information, power, and temperature statistics.</p> <p>The Monitor tab displays the following information:</p> <ul style="list-style-type: none"> • UCS server inventory • Firmware management information • VIF paths |
| Equipments tab | <p>Displays information about the chassis or the rack mount they are associated with.</p> |

Viewing the Managed Server Details

You can view the managed server information for the C-Series servers under the rack mounts and the blade servers under the chassis. The following section explains how to view the managed server related information using the Cisco UCS Manager plug-in for either rack mounts or chassis.

Procedure

-
- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS Manager plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click the domain for which you want view the details.
- Step 5** Click **Rack Mounts** or **Chassis**.
A list of all the rack mounts or chassis associated with the UCS domain appears.
- Step 6** Select a rack mount or chassis.
- Step 7** Click **Managed Servers**.
A list of all the managed servers associated with the rack mount or chassis appears.
- Step 8** Select a server from the list for which you want view the details.
In the right pane of the window, you can view the following server information:

| Name | Description |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Summary tab | <p>Displays high-level server information related to hardware, configuration, health status, and the Cisco UCS information.</p> <p>The Cisco UCS information includes UUID, associated service profile, serial number, action buttons, and so on. It also has the following action buttons:</p> <ul style="list-style-type: none"> • Launch KVM - You can launch the KVM console by clicking on this button. • Launch UCSM - You can launch the Cisco UCS Manager GUI by clicking on this button. • Turn Locator LED On - Switches on the locator LED. • Turn Locator LED Off - Switches off the locator LED. |

| Name | Description |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Monitor tab | Displays faults' information, and power statistics. The Monitor tab displays the following information: <ul style="list-style-type: none">• Managed server related information, such as networking, storage, alarm definitions, tags, permissions, and settings information on their respective tabs.• The UCS Manager plug-in Monitor view displays the UCS server inventory, firmware management information, and VIF Paths. |

Viewing the Fabric Extender Details

The following section explains how to view fabric extender related information using the Cisco UCS Manager plug-in.

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click the domain for which you want view the details.
- Step 5** Click **Rack Mounts**.
A list of all the rack mounts associated with the UCS domain appears.
- Step 6** Select a rack mount.
- Step 7** Click **FEX**.
In the right pane of the window, you can view the following fabric extender information:

| Name | Description |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Summary tab | <p>Displays high-level information related to fabric extender.</p> <p>The summary tab displays the following information:</p> <ul style="list-style-type: none"> • Fabric extender information, such as the model, total and available number of fabric ports, backplane ports, and so on. • Status section displays information, such as voltage, thermal, power, and so on. • Faults section displays a number of faults categorized based on fault severity. |
| Monitor tab | <p>Displays faults' information.</p> <p>The Monitor tab displays the following information:</p> <ul style="list-style-type: none"> • The associated PSUs and related information on the PSU tab. • The associated Input/output modules and related information on the IO Modules tab. • The fan modules and related information on the Fan tab. |
| More Objects tab | <p>Displays the rack mount with which the fabric extender is associated.</p> |

Viewing Firmware Packages, Tasks, and Host Firmware Details

Perform the following steps to view firmware packages, tasks, and host firmware for the servers:

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click the domain for which you want view the details.
- Step 5** In the right pane of the screen, click **Configure > Firmware**.

You can view the information related to the respective firmware tabs of the firmware tab:

| Name | Description |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host Firmware Packages tab | Displays the number of host firmware packages and related information. |
| Firmware Upload Tasks tab | Displays the number of firmware installation files and related information. Displays the following actions supported on the firmware upload tasks tab: <ul style="list-style-type: none">• Upload Firmware• Delete Upload Task |
| Firmware Packages tab | Displays the following information: <ul style="list-style-type: none">• The list of all the downloaded firmware and the related information.• Delete firmware package action support. |



CHAPTER 4

Performing Actions Using the Plug-in

This chapter includes the following sections:

- [Performing Actions Using the Plug-in, on page 21](#)
- [Managed and Unmanaged Server Actions, on page 22](#)
- [Service Profile Templates Actions, on page 26](#)
- [Service Profile Actions, on page 28](#)
- [Firmware Management Actions, on page 29](#)
- [UCS Domain Actions, on page 32](#)

Performing Actions Using the Plug-in

Cisco UCS Manager plug-in enables you to perform various actions on the servers, UCS domains, service profiles and service profile templates. The actions that you can perform are available, based on the association state of the servers and your user privileges. Before executing any action, an impact analysis is performed. Based on the result of the analysis, you are prompted to cancel or continue with the action.

You can perform the following actions on various components that can be managed using the plug-in:

- **Managed and Unmanaged servers:**
 - Create service profiles for servers — allow you to create hardware or template based server profiles.
 - Manage BIOS policy — allow you to modify BIOS policy for a server.
 - Associate service profile — allow you to associate service profile for a server.
 - Manage firmware host pack — allow you to change host firmware pack for a server.
 - Disassociate service profile — allow you to disassociate service profile from a server.
- **Managed servers:**
 - Launch KVM — allow you to launch the KVM console for the server.
 - Launch UCSM — allow you to launch the Cisco UCS Manager user interface for all registered UCS domains.
- **UCS domains:** Refresh UCS Domain — allows you to refresh the physical inventory of a UCS domain.
- **Service profile templates:**

- Manage host firmware pack — allow you to change host firmware pack for a service profile template.
- Manage Server Pools — allow you to change server pools.
- Create Service Profiles from Template — allow you to create service profiles using templates.
- **Service profiles:** Manage firmware host pack — allows you to change firmware host pack for a service profile.
- **Firmware:**
 - Upload Firmware —allow you to upload firmware bundle for a server.
 - Modify Package Versions— allow you to upgrade or downgrade the firmware package version.
 - Delete Upload Task— allow you to delete firmware upload task.
 - Delete Firmware Package—allow you to delete firmware package bundle.

The following sections describe how to perform the available actions.

Managed and Unmanaged Server Actions

Creating Service Profiles for Managed or Unmanaged Servers

Perform the following steps to create a service profile:

Procedure

-
- Step 1** Launch the vSphere HTML Client.
 - Step 2** Go to the Shortcuts page, and launch the Cisco UCS Manager plug-in.
 - Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
 - Step 4** Double-click a domain.
 - Step 5** Click **Rack Mounts** or **Chassis**.
A list of all the rack mounts or chassis associated with the UCS domain appears.
 - Step 6** Select a rack mount or chassis.
 - Step 7** Click **Managed Servers** or **Unmanaged Servers**.
A list of all the managed and unmanaged servers associated with the rack mount or chassis appears.
 - Step 8** Select a server and right-click.
For managed servers, right-click and select **UCS Manager Plug-in Actions**.
 - Step 9** Click **Create Service Profile for Server**.
Create Service Profile for Server screen appears.
 - Step 10** In the Create Service Profile for Server, perform the following:
 - **Create Service Profile in Organization** - Choose an organization from the drop-down menu.
 - Select **Hardware Based Service Profile** or **Template Based Service Profile**.

- If you have chosen **Hardware Based Service Profile**, enter the following:
 - Name of the service profile.
 - Select **Create Default vNICs** or **Create Default vHBAs**.
 - Click **OK**.
- If you have chosen **Template Based Service Profile**, enter the following:
 - Name of the service profile.
 - Select a service profile template form the drop-down menu.
 - Click **OK**.

This creates a service profile and associates it with the chosen server.

Managing BIOS Policies

Perform the following steps to manage a BIOS policy for a server:

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click a domain.
- Step 5** Click **Rack Mounts** or **Chassis**.
A list of all the rack mounts or chassis associated with the UCS domain appears.
- Step 6** Select a rack mount or chassis.
- Step 7** Click **Managed Servers** or **Unmanaged Servers**.
A list of all the managed or unmanaged servers associated with the rack mount or chassis appears.
- Step 8** Select a server and right-click.
- Step 9** Click **Manage BIOS Policy**.
Manage BIOS Policy screen appears.
- Step 10** In the **Manage BIOS Policy** screen, select a BIOS Policy from the drop-down menu.
- Step 11** Click **Save Changes**.
- Step 12** To change the BIOS parameters, click on **BIOS Policy Instance** link.
BIOS Policy screen appears.
- Step 13** Make the necessary changes to the BIOS parameters and click **Save Changes**.

Note You can associate a BIOS policy to multiple servers, if you make changes to the policy, changes will apply to all the associated servers.

Associating Service Profiles with the Servers

Perform the following steps to associate a service profile with a server:

Procedure

- Step 1** Launch the vSphere HTML Client.
 - Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
 - Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
 - Step 4** Double-click a domain.
 - Step 5** Click **Rack Mounts** or **Chassis**.
A list of all the rack mounts or chassis associated with the UCS domain appears.
 - Step 6** Select a rack mount or chassis.
 - Step 7** Click **Managed Servers** or **Unmanaged Servers**.
A list of all the managed or unmanaged servers associated with the rack mount or chassis appears.
 - Step 8** Select a server and right-click.
 - Step 9** Click **Associate Service Profile**.
Associate Service Profile screen appears.
 - Step 10** In the **Associate Service Profile** screen, select **Available Service Profiles** or **All Service Profiles**.
A list of service profiles appears.
 - Step 11** Select a service profile from the list and click **OK**.
The chosen service profile is associated with the server.
-

Managing Host Firmware Pack

Perform the following steps to manage firmware host packs for servers:

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click a domain.
- Step 5** Click **Rack Mounts** or **Chassis**.
A list of all the rack mounts or chassis associated with the UCS domain appears.
- Step 6** Select a rack mount or chassis.
- Step 7** Click **Managed Servers** or **Unmanaged Servers**.
A list of all the managed or unmanaged servers associated with the rack mount or chassis appears.
- Step 8** Select a server and right-click.
- Step 9** Select **Manage Firmware Host Pack**.

- The **Manage Firmware Host Pack** wizard appears.
- Step 10** In the **Manage Firmware Host Pack** wizard, select a firmware host pack from the drop-down menu.
- Step 11** Click **Save Changes**.
-

Disassociating a Service Profile from a Managed or Unmanaged Server

Perform the following steps to disassociate a service profile from a server:

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click a domain.
- Step 5** Click **Rack Mounts** or **Chassis**.
A list of all the rack mounts or chassis associated with the UCS domain appears.
- Step 6** Select a rack mount or chassis.
- Step 7** Click **Managed Servers** or **Unmanaged Servers**.
A list of all the managed or unmanaged servers associated with the rack mount or chassis appears.
- Step 8** Select a server and right-click.
- Step 9** Click **Disassociate Service Profile**.
- Step 10** In the **Disassociate Service Profile** screen, select the service profile and click **OK**.
The service profile is disassociated from the server.
-

Launching the KVM Console of a Managed Server



Note The following steps are valid for Release 3.0(x) onwards.

The KVM Launch Manager enables you to access a server through the KVM console without logging in to Cisco UCS Manager.

Perform the following steps to launch the KVM console of the server:

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** Navigate to the server on which you want to launch the KVM.

- Step 4** Select the server, and click **Launch KVM**.
A list of configured in-band management and out-of-band management IP addresses are displayed.
- Step 5** Select the IP address through which you want to launch the KVM, and click **OK**.
-

Launching the UCSM User Interface for a Managed Server

Perform the following steps to launch the Cisco UCS Manager user interface:

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** On the left pane, click **Hosts and Clusters**.
A list of all the hosts appear.
- Step 4** Select a host with a registered UCSM domain.
- Step 5** On the left pane, select a server and right-click and choose **All Cisco UCS vCenter Plug-in Actions**.
A list of all the available actions appear.
- Step 6** Click **Launch UCSM**.
-

Service Profile Templates Actions

Managing Host Firmware Pack for Service Profile Templates

Perform the following steps to manage firmware host packs for servers:

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click a domain.
- Step 5** On the right pane of the screen, click **Configure > Service Profile Template**.
- Step 6** Select a service profile template.
- Step 7** Click **Actions** and select **Manage Firmware Host Pack**.
The **Manage Firmware Host Pack** wizard appears.
- Step 8** In the **Manage Firmware Host Pack** wizard, select a firmware host pack from the drop-down menu.

- Step 9** Click **Save Changes**.
-

Managing Server Pools

Perform the following steps to manage server pools:

Procedure

- Step 1** Launch the vSphere HTML Client.
 - Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
 - Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
 - Step 4** Double-click a domain.
 - Step 5** On the right pane of the screen, click **Configure > Service Profile Templates**
 - Step 6** Select a service profile template.
 - Step 7** Click **Actions** and select **Manage Server Pools**.
Associated Server Pools pop-up appears.
 - Step 8** Click **Associate with Server Pool**.
Associate with Server Pool pop-up appears.
 - Step 9** Select **Pool Assignment** and **Server Pool Qualification** from the respective drop-down menus.
 - Step 10** Click **OK**.
-

Creating Service Profiles From Templates

Perform the following steps to create service profiles from templates:

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click a domain.
- Step 5** On the right pane of the screen, click **Configure > Service Profile Templates**
- Step 6** Select a service profile template.
- Step 7** Click **Actions** and select **Create Service Profiles From Template** using which you want to create a service profile.
Create Service Profiles From Template pop-up appears.
- Step 8** Enter the prefix, suffix and the number of instances of the service profile you want to create in the respective fields.

Step 9 Click **OK**.

Service Profile Actions

Managing Host Firmware Pack for a Service Profile

Perform the following steps to manage firmware host packs for servers:

Procedure

- Step 1** Launch the vSphere HTML Client.
 - Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
 - Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
 - Step 4** Double-click a domain.
 - Step 5** On the right pane of the screen, click **Configure > Service Profile**.
 - Step 6** Select a service profile.
 - Step 7** Click **Actions** and select **Manage Firmware Host Pack**.
The **Manage Firmware Host Pack** wizard appears.
 - Step 8** In the **Manage Firmware Host Pack** wizard, select a firmware host pack from the drop-down menu.
 - Step 9** Click **Save Changes**.
-

Acknowledging Pending Activities

Perform the following steps to acknowledge the pending activities for servers:

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click a domain.
- Step 5** On the right pane of the screen, click **Configure > Service Profile**.
- Step 6** Click **Pending Activities**.
The **Pending Activities** wizard appears.
- Step 7** On the **Pending Activities** wizard, check the **Reboot now** check box against the servers for which you want to trigger the reboot.

Step 8 Click **Ok**.

Firmware Management Actions

Uploading Firmware Packages

Perform the following steps to upload firmware host packs for the servers:

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click a domain.
- Step 5** On the right pane of the screen, click **Configure > Firmware > Firmware Upload Tasks**.
- Step 6** Click **Actions** and select **Upload Firmware**.
The **Upload Firmware Bundle** dialog box appears.
- Step 7** In the **Upload Firmware Bundle** dialog box, complete the following:

| Action | Description |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protocol field | The protocol type. This can be one of the following: <ul style="list-style-type: none"> • FTP • TFTP • SCP • SFTP |
| Server field | The IP address or hostname of the server on which the firmware bundle resides. Depending on the setting in the Protocol field, the name of the server may vary. |
| Filename field | The name of the firmware bundle on the server. |
| Remote Path field | The absolute path to the file on the remote server. If you use SCP , the absolute path is always required. If you use any other protocol, you may not need to specify a remote path if the file resides in the default download folder. For details about how your file server is configured, contact your system administrator. |

| Action | Description |
|----------------|----------------------------------------------------------------------------------------------------------------|
| User field | The username the system should use to log in to the server. This field does not apply if the protocol is TFTP. |
| Password field | The password for the server. This field does not apply if the protocol is TFTP. |

- Step 8** Click **Ok**.
Uploads the firmware package and the uploaded package appears on the **Firmware Packages** tab.
- Step 9** (Optional) To delete a firmware package, select the firmware package and click **Actions > Delete Upload Task**.
- Step 10** (Optional) Click **Ok** in the delete confirmation prompt.

Modifying Package Version for Host Firmware Pack

Perform the following steps to modify the firmware host packs for the servers:

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
- Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
- Step 4** Double-click a domain.
- Step 5** On the right pane of the screen, click **Configure > Firmware > Host Firmware Packages**.
- Step 6** Expand **Org**.
- Step 7** Select the host firmware package that is associated with the service profile or the servers for which you want to upgrade or downgrade the firmware.
- Note** You can view the currently associated service profiles to host firmware package by clicking **Modify Package Version**. This displays the existing packages.
- Note** If you want to upgrade the firmware on server that does not have an associated service profile, select the **default** host firmware package. Choosing this option upgrades the firmware on all the unassociated servers or service profiles associated to the default host firmware package.
- Step 8** Click **Actions > Modify Package Versions**.
The **Modify Package Versions** wizard appears.
- Step 9** For the B-Series and C-Series servers, select the firmware versions to which you want to upgrade from the respective **Blade Package** and **Rack Package** drop-down lists.

- Step 10** The **Host Firmware Package Dependencies** area, lists all the associated service profiles, affected hosts and their VMs.
- Step 11** Click **Next**.
Summary of the impacted endpoints and their status appear.
- Step 12** (Optional) Use the available filter option to view specific impacts.
- Step 13** If ESXi is running on any impacted server, **Move all the running hosts to maintenance mode** is enable by default. If you want to update the firmware package without moving the host to maintenance mode, check **Upgrade even with running server**.
- Note** The firmware upgrade process terminates if the hosts are not successfully moved to a maintenance mode.
- Note** After the upgrade, all the hosts remain in the maintenance mode until you manually exit the hosts from the maintenance mode.
- Step 14** Click **Update**.
Initiates the upgrade process.
- Note** If the upgrade process aborts due to any fault, check the hosts status manually to see whether any of the hosts are pending or moved to maintenance mode.
- Note** If you encounter a timeout error during the upgrade process, move the hosts to maintenance mode manually, and then rerun the **Modify Package Versions** wizard to trigger the firmware upgrade.
- Step 15** After successful firmware upgrade, an **Alert** message dialog box appears. Review the message and click **Ok** to exit.
If you want to trigger an immediate reboot for a few or all the servers, click **Pending Activities**.
- Note** The **Pending Activities** option appear when UCS maintenance policy is set to **User Acknowledge** or **Scheduled for maintenance window** for associated service profiles.
- Step 16** (Optional) On the **Pending Activities** page, you can do the following:
- On the **Scheduled Activities** tab, you can override the schedule state and trigger an immediate reboot for the servers in the list. For immediate reboot, check the **Reboot Now** checkbox against respective service profile and click **Ok**.
 - on the **User Acknowledged Activities** tab, you can acknowledge an activity, or trigger immediate reboot for the servers in the list. For immediate reboot, check the **Reboot Now** checkbox against respective service profile and click **Ok**.

Deleting Uploaded Task

Procedure

- Step 1** Launch the vSphere HTML Client.

- Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
 - Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
 - Step 4** Double-click a domain.
 - Step 5** On the right pane of the screen, click **Configure > Firmware > Firmware Upload Tasks**.
 - Step 6** Select the task that you want to delete.
 - Step 7** Click **Actions** and select **Delete Upload Task**.
 - Step 8** Click **OK** in the delete confirmation box.
Click **OK** in the delete success box.
-

Deleting Firmware Package

Procedure

- Step 1** Launch the vSphere HTML Client.
 - Step 2** Go to the Shortcuts page, and launch the Cisco UCS plug-in.
 - Step 3** In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.
 - Step 4** Double-click a domain.
 - Step 5** On the right pane of the screen, click **Configure > Firmware > Firmware Packages**.
 - Step 6** Select the firmware package that you want to delete.
 - Step 7** Click **Actions** and select **Delete Firmware Package**.
 - Step 8** Click **OK** in the delete confirmation box.
Click **OK** in the delete success box.
-

UCS Domain Actions

Refreshing UCS Domain Inventory

Perform the following steps to reload a UCS domain inventory:

Procedure

- Step 1** Launch the vSphere HTML Client.
- Step 2** Go to the Shortcuts page, and launch the Cisco UCS Manager plug-in.

Step 3 In the **Home** tab on the **Cisco UCS Management Center** page, you can view a list of all the registered UCS domains.

Step 4 Double-click a domain.

Step 5 Select **Refresh UCS Domain**.

If **Actions** are not working, then perform the following steps:

- a. Click **More Objects > Fabric Interconnects**.
- b. From the list, click any Fabric interconnect.
- c. Select the **More Objects** tab.
- d. Right-click **Domain** and select **Reload UCS Domain**.

Reloads the UCS domain inventory.



CHAPTER 5

Using the Cisco UCS Provider for Proactive High Availability (HA)

This chapter includes the following sections:

- [Cisco UCS Provider for Proactive HA](#) , on page 35
- [Registering Cisco UCS Manager Provider and Enabling Proactive HA Feature](#), on page 36
- [Enabling Cisco UCS Manager Provider](#), on page 37
- [Unregistering a UCS Manager Provider](#), on page 38
- [Modifying Cisco UCS Failure Conditions](#), on page 38
- [List of Cisco UCS Provider Failure Conditions for Proactive HA](#), on page 38
- [Adding Custom Faults for Proactive HA Monitoring](#), on page 41
- [Deleting Custom Faults for Proactive HA Monitoring](#), on page 41

Cisco UCS Provider for Proactive HA

Cisco UCS Provider for Proactive HA feature allows the system to assess the health of the server running the ESXi host. It assess if the server is healthy, moderately or severely degraded. Any fault which occurs from the Cisco approved predefined list of faults with critical or major severity is reported to the vCenter. For more information on Proactive HA feature and providers, see VMware documentation.

Prerequisites and User Privileges

To use Cisco UCS Provider for the Proactive HA, we recommend that you enable the following:

- vSphere DRS
- Proactive HA

You must have the following privileges to use Cisco UCS Provider for the Proactive HA:

- **Health Update Provider**
 - Register
 - Unregister
 - Update

- **Host**
 - Inventory
 - Modify Cluster
 - Configuration
 - Quarantine
 - Maintenance
- **Storage Views**
 - View

Registering Cisco UCS Manager Provider and Enabling Proactive HA Feature

Before you begin

- The default username is admin.

Procedure

-
- Step 1** Log into **Cisco UCS Manager Plug-in Appliance** Web UI. Enter the username as admin and provide the password.
- The list of registered VMware vCenter servers is displayed in the **Registered VMware vCenter Servers** table.
- Step 2** Click **Register**.
- The **Add VMware vCenter Servers** pop-up window is displayed.
- Step 3** Enter the required information of a VMware vCenter server in the **Add VMware vCenter Servers** pop-up window.
- a) Enter the following details:

| Field | Description |
|----------------|-----------------------------------------------------------|
| FQDN/Server IP | FQDN or Server IP of the VMware vCenter server. |
| Port | The port to use for communication. The default is 443. |
| Username | Enter the user name for the VMware vCenter server. |
| Password | Enter the password for the VMware vCenter server. |

- b) Select the **Proactive HA** checkbox to enable Proactive HA in the vCenter server.
- c) Click **Next**.

The vCenter server details are validated and added in the **Registered VMware vCenter Servers** table.

The field **Proactive HA Status** displays **Enabled** for the respective vCenter server.

Alternatively, you can enable Proactive HA in a VMware vCenter server by performing the below given steps:

- Step 4** Launch the vSphere HTML Client.
- Step 5** Click the **Proactive HA Registration** tab.
- Step 6** In the **Register Cisco UCS Manager Provider** area, select the VMware vCenter server.
- Step 7** Click **Register**.

Enabling Cisco UCS Manager Provider

Procedure

- Step 1** Click **Hosts and Clusters > Cluster > Configure > vSphere Availability > Proactive HA > Edit**.
- Step 2** On the **Proactive HA Failures and Responses** tab, complete the following:

| Name | Description |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Automation Level drop-down list | <p>Whether to migrate the VMs automatically or manually in case of hosts failure.</p> <p>This can be one of the following:</p> <ul style="list-style-type: none"> • Manual • Automated <p>We recommend that you select Automated level.</p> |
| Remediation drop-down list | <p>The action to be taken depending on the severity of the failure,</p> <p>This can be one of the following:</p> <ul style="list-style-type: none"> • Quarantine mode for all failures • Quarantine mode for moderate and Maintenance Mode for sever failures (Mixed) • Maintenance mode for all failures <p>We recommend that you select Mixed mode.</p> |

- Step 3** From the list, check the **Cisco UCS Manager Provider** check box, and click **OK**.

Unregistering a UCS Manager Provider

Before you begin

Before you unregister, perform the following step if **Proactive HA Provider** is enabled:

- Disable the HA provider and turn off **Proactive HA** from **vSphere Availability** in the **vCenter Cluster Configure** page.

Procedure

-
- Step 1** Launch the vSphere HTML Client.
- Step 2** Click **Proactive HA Registration** tab.
- Step 3** Click **Unregister**.
-

Modifying Cisco UCS Failure Conditions

Procedure

-
- Step 1** Click **Hosts and Clusters > Cluster > Configure > vSphere Availability > Proactive HA > Edit**.
- Step 2** From the list of providers under **Providers** tab, check the **Cisco UCS Provider** check box, and click **Edit**.
A list of Cisco UCS Provider failure conditions appears.
- Step 3** To block a failure condition on a host in the cluster, check the failure condition and the associated host check box.
- Step 4** To select all current and future hosts in the cluster, check the **Cluster-level** check box.
- Step 5** Click **OK**.
-

List of Cisco UCS Provider Failure Conditions for Proactive HA

Table 1: Fault Conditions in Cisco UCS Provider

| Sl. No. | Fault ID | Component Type | Description |
|---------|----------|----------------|-------------------------------------------------------------|
| 1. | F0190 | Memory | Memory array voltage exceeds the specified hardware voltage |

| Sl. No. | Fault ID | Component Type | Description |
|---------|----------|----------------|----------------------------------------------------------------------------|
| 2. | F0539 | Network | IO controller temperature is outside the upper or lower critical threshold |
| 3. | F0185 | Memory | Memory Unit Inoperable |
| 4. | F0313 | Power | Compute Physical BIOS POST Timeout |
| 5. | F0317 | Storage | Compute Physical Inoperable |
| 6. | F0373 | Fan | Equipment Fan Inoperable |
| 7. | F0374 | Power | Equipment PSU Inoperable |
| 8. | F0484 | Fan | Equipment Fan Performance Threshold Lower Non Recoverable |
| 9. | F0187 | Memory | Memory Unit Thermal Threshold Critical |
| 10. | F0188 | Memory | Memory Unit Thermal Threshold Non Recoverable |
| 11. | F0312 | Storage | Compute Physical Thermal Problem |
| 12. | F0382 | Fan | Equipment Fan Module Thermal Threshold Critical |
| 13. | F0384 | Fan | Equipment Fan Module Thermal Threshold Non Recoverable |
| 14. | F0383 | Power | Equipment PSU Thermal Threshold Critical |
| 15. | F0385 | Storage | Equipment PSU Thermal Threshold Non Recoverable |
| 16. | F0540 | Network | Compute IOHub Thermal Threshold Non Recoverable |

| Sl. No. | Fault ID | Component Type | Description |
|---------|----------|----------------|------------------------------------------------------|
| 17. | F0191 | Memory | Memory Array Voltage Threshold Non Recoverable |
| 18. | F0389 | Power | Equipment PSU Voltage Threshold Critical |
| 19. | F0391 | Power | Equipment PSU Voltage Threshold Non Recoverable |
| 20. | F0425 | Power | Compute Board CMOS Voltage Threshold Non Recoverable |
| 21. | F0310 | Power | Compute Board Power Error |
| 22. | F0311 | Power | Compute Physical Power Problem |
| 23. | F0369 | Power | Equipment PSU Power Supply Problem |
| 24. | F37600 | Memory | Memory temperature beyond threshold |
| 25. | F35962 | Power | Motherboard power consumption beyond threshold |
| 26. | F0174 | Power | Processor is inoperable |
| 27. | F0181 | Power | Local disk has become inoperable |
| 28. | F1004 | Power | Storage controller is inaccessible |
| 29. | F0209 | Network | Network facing adapter interface is down |
| 30. | F1007 | Power | Virtual drive has become inoperable |
| 31. | F1706 | Memory | ADDDC Memory RAS Problem |

Adding Custom Faults for Proactive HA Monitoring

Before you begin

You must unregister the proactive HA in the domains, before you add a custom fault. See [Unregistering a UCS Manager Provider, on page 38](#).

Before you unregister, perform the following step if **Proactive HA Provider** is registered:

- Disable the HA provider and turn off **Proactive HA** from **vSphere Availability** in the **vCenter Cluster Configure** page.

Procedure

-
- Step 1** Launch the vSphere HTML Client.
- Step 2** From the **Shortcuts** page, launch Cisco UCS plug-in.
- Step 3** Click **Proactive HA Registration** tab.
- Step 4** Click **ADD**.
- Step 5** In the **Fault Monitoring Details** area, enter the following:

| Name | Description |
|----------------|-----------------------------|
| Fault Code | Fault code |
| Description | Description for the fault |
| Component Type | Component type of the fault |

Deleting Custom Faults for Proactive HA Monitoring

Before you begin

You must unregister the proactive HA in the domains, before you delete a custom fault. See [Unregistering a UCS Manager Provider, on page 38](#).

Before you unregister, perform the following step if **Proactive HA Provider** is registered:

- Disable the HA provider and turn off **Proactive HA** from **vSphere Availability** in the **vCenter Cluster Configure** page.

Procedure

-
- Step 1** Launch the vSphere HTML Client.

Step 2 From the **Shortcuts** page, launch Cisco UCSManager plug-in appliance.

Step 3 Click **Proactive HA Registration** tab.

Step 4 Select the custom fault that you want to delete.

Step 5 Click **Delete**.

The confirmation pop-up window is displayed.
