Cisco UCS Manager Plug-in for VMware vSphere Web Client User Guide, Release 2.x

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CONTENTS

Overview

This chapter includes the following sections:

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

Cisco UCS Manager plug-in is a VMware vSphere web 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 web client. Cisco UCS icon is available in the **Home Administration** page in the web client.

Note Cisco UCS Manager plug-in is a VMware vSphere web client plug-in is supported only by web client and not by HTML client.

You can perform the following tasks using the plug-in:

- 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:

- .Net Framework 4.5 or higher

- Install VMware PowerCLI 5.1 or higher to run the registration tool

- Install VMware vCenter 5.5 or higher

  For VMware vCenter 5.5, install the vCenter and web client on the same machine.

  For information on VMware vSphere web client prerequisites, see http://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=2005083

VMware vSphere Web Client Releases

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

- Release 6.7
- Release 6.5
- Release 6.0
- Release 5.5

Supported Cisco UCS Manager Releases

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

- Release 4.0
- Release 3.2
- Release 3.1
- Release 3.0
- Release 2.2
- Release 2.1

Installing the Plug-in and Registering the UCS Domains

This chapter includes the following sections:

User Privileges

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

For example, if you registered a UCS domain with admin privileges, you can perform actions on that domain using the plug-in. You can perform various actions on the servers, firmware, UCS domains, service profiles, and service profile templates. Whereas, if you registered a UCS domain with read-only privileges, you can launch Cisco UCS Manager GUI and can view the domains that you registered.

When you log in to the Cisco UCS Manager plug-in, you can view the domains that you have registered. You cannot view or edit the UCS domains registered by different users. However, you can view the domains registered by other users if you have the extension privilege and the domain registered is publicly visible.

For more information on each privilege and the user role given that privilege by default, see

http://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/sw/gui/config/guide/2-2/b_UCSM_GUI_
Configuration_Guide_2_2/b_UCSM_GUI_Configuration_Guide_2_2_chapter_01010.html#concept_
055CA3D0219B44E0AA215F4F169BBB89.

Installing the Cisco UCS Manager Plug-in for vSphere Web Client

Before you begin

- Plug-in package hosted on HTTP or HTTPS server. Ensure that the HTTP or HTTPS URL of the plug-in zip file is reachable from both vCenter server and the machine from which the plug-in is registered

- Close all the web client browser sessions

Procedure

Step 1   On the Cisco.com download site for Cisco UCS Management Partner Ecosystem Software, download the Cisco UCS Manager plug-in and the registration tool zip files.

The files are stored in your local download folder.

Step 2   Unzip the registration tool and double-click to launch it. Cisco UCS plug-in Registration Tool screen appears.

Step 3   To register a new plug-in, populate the following fields:

Note   If you are reregistering, the following fields are already populated.

- **IP/Hostname**—IP or hostname of the vCenter server

- **Username**—Username of the vCenter server

- **Password**—Password of the vCenter server

- **Plugin location**—HTTPS/HTTP URL of the plugin zip file. For example, https://10.1x.1x.1/plugins/ucs/ucs-vcplugin-1.0.1.zip

Note   If you want to unregister a UCS Manager plug-in, click the **Unregister** plug-in radio button, and complete the fields.

Step 4   Click **Submit**.

Important   When the plug-in is hosted on HTTP URL, you are prompted to take the following action:

If the plugin is hosted on an HTTP URL, a configuration file named "webclient.properties" must be modified to add "allowHttp=true."

The default location of file for vSphere Web Client 6.x and the higher releases is

Windows: C:\ProgramData\VMware\vCenterServer\cfg\vsphere-client

VCSA: /etc/vmware/vsphere-client and for vSphere Web Client 5.x releases is

Windows: C:\ProgramData\VMware\vSphere Web Client

VCSA: /var/lib/vmware/vsphere-client.

The vSphere web client service must be restarted after this modification

Note   If you are reregistering, you may see **Already Registered** warning dialog box, with the following message: `Cisco UCS plug-in 2.x is already registered. If the plug-in files are already downloaded, they won't be downloaded again until they are removed manually and vSphere web client service is restarted.`

Review the message and click **OK** to continue.

Step 5   Restart the web client service.

Note   If you encounter any error, relaunch the web browser session. If the error continues, restart the web client service.

The Cisco UCS Manager plug-in is successfully registered.

Upgrading Cisco UCS Manager Plug-In for vSphere Web Client

Procedure

Step 1   On the Cisco.com download site for Cisco UCS Management Partner Ecosystem Software, download the Cisco UCS Manager plug-in and registration tool zip files.

The files are stored in your local download folder.

Step 2   If Cisco UCS Provider for Proactive HA is registered, unregister it.

For more information on how to unregister the Cisco UCS Provider, seeUnregistering a Cisco UCS Provider, on page 29.

Step 3   Double-click the unzipped .exe file to launch the registration setup file.

Step 4   If the Cisco UCS Manager plug-in is already installed, you are prompted to upgrade the plug-in. Confirm the upgrade and continue with the installation.

For information on how to install the Cisco UCS plug-in, see Installing the Cisco UCS Manager Plug-in for vSphere Web Client, on page 4.

Step 5   Restart the web client service.

Step 6   Once the Cisco UCS plug-in is installed, register the Cisco UCS Provider for Proactive HA.

For more information on how to register the Cisco UCS Provider for Proactive HA, see Registering a Cisco UCS Provider, on page 28

Note   Downgrade from any version of Cisco UCS Manager plug-in is not supported. However, to downgrade the plug-in, unregister the running version, register the version you want to use, and restart the vSphere Web Client services.

Registering the UCS Domains

Using the vSphere web 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 web client.

Step 2 On the **Home** tab, double-click **Cisco UCS**.
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.

- **Password**—UCS domain password.

- **Port**—Port number.

- **SSL**—To use a secure connection to Cisco UCS Manager

- **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.
Re-register	Allows you to reregister a UCS domain.

Viewing Information Using the Plug-in

This chapter includes the following sections:

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 Web Client.
Step 2	Go to the Home page, and launch the Cisco UCS plug-in.
Step 3	On the **Home** tab, 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: • High level and system specific UCS domain information, such as number of ESXi and non-ESXi 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.

Manage tab	The manage tab displays the following information:
	
	• 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:
	    • Pending Activities
	    • Manage Host Firmware Pack
	
	• Displays the following actions supported on the service profile template tab:
	    • Manage Host Firmware Pack
	    • Manage Server Pool
	    • Create Service Profiles from Template
	
	• Displays the following actions supported on the firmware tab:
	    • Modify Package Versions
	    • Upload Firmware
	    • Delete Upload Task
	    • Delete Firmware Package

Related Objects 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 Web Client.

Step 2   Go to the Home page, and launch the Cisco UCS plug-in.

Step 3   On the **Home** tab, 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: • High level chassis information and hardware specific information, such as overall status, number of ESXi and non-ESXi 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.
Manage tab	The manage tab displays the following information: • 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.
Related Objects tab	Displays the ESXi and non ESXi 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 Web Client.

Step 2   Go to the Home page, and launch the Cisco UCS plug-in.

Step 3   On the **Home** tab, 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: • 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.
Manage tab	The manage tab displays the following information: • The associated PSUs and related information on the **PSU** tab. • The fan modules and related information on the **Fan** tab.
Related Objects tab	Displays the UCS domain with which the fabric interconnect is associated on their respective tabs.

Viewing the Non ESXi Server Details

You can view the non-ESXi 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 non-ESXi server related information using the Cisco UCS Manager plug-in for either rack mounts or chassis.

Procedure

Step 1 Launch the vSphere Web Client.

Step 2 Go to the Home page, and launch the Cisco UCS plug-in.

Step 3 On the **Home** tab, 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 **Non ESXi Servers**.
A list of all the non ESXi 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	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.
	It also has the following action buttons:
	• **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.
Manage tab	The manage tab displays the following information: • UCS server inventory • Firmware management information • VIF paths
Monitor tab	Displays faults' information, power, and temperature statistics.
Related Objects tab	Displays information about the chassis or the rack mount they are associated with.

Viewing the ESXi Server Details

You can view the ESXi 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 ESXi server related information using the Cisco UCS Manager plug-in for either rack mounts or chassis.

Procedure

Step 1   Launch the vSphere Web Client.

Step 2   Go to the Home page, and launch the Cisco UCS plug-in.

Step 3   On the **Home** tab, 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 **ESXi Servers**.
A list of all the ESXi 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	Displays high-level server information related to hardware, configuration, health status, and the Cisco UCS information. The Cisco UCS information includes UUID, associated service profile, serial number, action buttons, and so on. It also has the following action buttons: • **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.
Manage tab	The manage tab displays the following information: • ESXi server related information, such as networking, storage, alarm definitions, tags, permissions, and settings information on their respective tabs. • The Cisco UCS tab displays the UCS server inventory, firmware management information, and VIF Paths.
Monitor tab	Displays faults' information, and power statistics.
Related Objects tab	Displays related information on chassis or the rack mount.

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 Web Client.
Step 2	Go to the Home page, and launch the Cisco UCS plug-in.
Step 3	On the **Home** tab, 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	Displays high-level information related to fabric extender. The summary tab displays the following information: • 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	Displays faults' information.
Manage tab	The manage tab displays the following information: • 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.
Related Objects tab	Displays the rack mount with which the fabric extender is associated.

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 Web Client.
Step 2	Go to the Home page, and launch the Cisco UCS plug-in.
Step 3	On the **Home** tab, 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 **Manage** > **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:
	• Upload Firmware
	• Delete Upload Task
Firmware Packages tab	Displays the following information:
	• The list of all the downloaded firmware and the related information.
	• Delete firmware package action support.

Performing Actions Using the Plug-in

This chapter includes the following sections:

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:

- • **ESXi and non ESXi 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.

- • **ESXi 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:** Reload UCS Domain — allows you to reload 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.

ESXi and Non ESXi Server Actions

Creating Service Profiles for ESXi or Non-ESXi Servers

Perform the following steps to create a service profile:

Procedure

Step 1	Launch the vSphere Web Client.
Step 2	Go to the Home page, and launch the Cisco UCS plug-in.
Step 3	On the **Home** tab, 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 **ESXi Servers** or **Non ESXi Servers**. A list of all the ESXi or non ESXi servers associated with the rack mount or chassis appears.
Step 8	Select a server and right-click. For ESXi servers, right-click and select **All Cisco UCS vCenter Plugin 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 Web Client.
Step 2	Go to the Home page, and launch the Cisco UCS plug-in.
Step 3	On the **Home** tab, 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 **ESXi Servers** or **Non ESXi Servers**. A list of all the ESXi or non ESXi 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 Web Client.
Step 2	Go to the Home page, and launch the Cisco UCS plug-in.
Step 3	On the **Home** tab, 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 **ESXi Servers** or **Non ESXi Servers**. A list of all the ESXi or non ESXi 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 Web Client.
Step 2	Go to the Home page, and launch the Cisco UCS plug-in.
Step 3	On the **Home** tab, 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 **ESXi Servers** or **Non ESXi Servers**. A list of all the ESXi or non ESXi servers associated with the rack mount or chassis appears.
Step 8	Select a server and right-click.
Step 9	Click **Actions** and 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 ESXi or Non ESXi Server

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

Procedure

Step 1	Launch the vSphere Web Client.
Step 2	Go to the Home page, and launch the Cisco UCS plug-in.
Step 3	On the **Home** tab, 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 **ESXi Servers** or **Non ESXi Servers**. A list of all the ESXi or non ESXi 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 an ESXi Server

Note	The following steps are valid for Release 2.0(x).

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 Web Client.
Step 2	Go to the Home 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 an ESXi Server

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

Procedure

Step 1	Launch the vSphere Web Client.
Step 2	Go to the Home 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 Web Client.
Step 2	Go to the Home page, and launch the Cisco UCS plug-in.
Step 3	On the **Home** tab, 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 **Manage** > **Service Profile Template**.
Step 6	Click **Actions** and select **Manage Firmware Host Pack**. The **Manage Firmware Host Pack** wizard appears.
Step 7	In the **Manage Firmware Host Pack** wizard, select a firmware host pack from the drop-down menu.
Step 8	Click **Save Changes**.

Managing Server Pools

Perform the following steps to manage server pools:

Procedure

Step 1	Launch the vSphere Web Client.
Step 2	Go to the Home page, and launch the Cisco UCS plug-in.
Step 3	On the **Home** tab, 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 **Manage** > **Service Profile Templates**
Step 6	Click **Actions** and select **Manage Server Pools**. Associated Server Pools pop-up appears.
Step 7	Click **Associate with Server Pool**. Associate with Server Pool pop-up appears.
Step 8	Select **Pool Assignment** and **Server Pool Qualification** from the respective drop-down menus.
Step 9	Click **OK**.

Creating Service Profiles From Templates

Perform the following steps to create service profiles from templates:

Procedure

Step 1	Launch the vSphere Web Client.
Step 2	Go to the Home page, and launch the Cisco UCS plug-in.
Step 3	On the **Home** tab, 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 **Manage** > **Service Profile Templates**
Step 6	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 7	Enter the prefix, suffix and the number of instances of the service profile you want to create in the respective fields.
Step 8	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 Web Client.
Step 2	Go to the Home page, and launch the Cisco UCS plug-in.
Step 3	On the **Home** tab, 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 **Manage** > **Service Profile**.
Step 6	Click **Actions** and select **Manage Firmware Host Pack**. The **Manage Firmware Host Pack** wizard appears.
Step 7	In the **Manage Firmware Host Pack** wizard, select a firmware host pack from the drop-down menu.
Step 8	Click **Save Changes**.

Acknowledging Pending Activities

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

Procedure

Step 1	Launch the vSphere Web Client.
Step 2	Go to the Home page, and launch the Cisco UCS plug-in.
Step 3	On the **Home** tab, 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 **Manage** > **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 Web Client.

Step 2 Go to the Home page, and launch the Cisco UCS plug-in.

Step 3 On the **Home** tab, 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 **Manage** > **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: • **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.
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 **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 Web Client.

Step 2   Go to the Home page, and launch the Cisco UCS plug-in.

Step 3   On the **Home** tab, 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 **Manage** > **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 **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 ESXi 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:

a) 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**.

b) 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 Web Client.

Step 2   Go to the Home page, and launch the Cisco UCS plug-in.

Step 3   On the **Home** tab, 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 **Manage** > **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 Web Client.

Step 2   Go to the Home page, and launch the Cisco UCS plug-in.

Step 3   On the **Home** tab, 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 **Manage** > **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

Reloading UCS Domain Inventory

Perform the following steps to reload a UCS domain inventory:

Procedure

Step 1   Launch the vSphere Web Client.

Step 2   Go to the Home page, and launch the Cisco UCS plug-in.

Step 3   On the **Home** tab, you can view a list of all the registered UCS domains.

Step 4   Double-click a domain.

Step 5   Select **Reload UCS Domain**.
Reloads the UCS domain inventory.

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

This chapter includes the following sections:

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 a Cisco UCS Provider

Procedure

Step 1	Launch the vSphere Web Client.
Step 2	From the **Home** page, launch Cisco UCS plug-in.
Step 3	Click **Proactive HA Registration** tab.
Step 4	In the **Register Cisco UCS Provider** area, enter the following:

Name	Description
Username	Enter the vCenter username
Password	Enter the vCenter password

Note If you want to update the vCenter credentials for Cisco UCS Provider, then enter a new password and click **Update**.

Step 5	Click **Register**.

The Cisco UCS Provider is visible when the domains which manage all the hosts in the cluster are registered.

Important To upgrade the registered Cisco UCS Manager plug-in, unregister the Cisco UCS Provider for Proactive HA, upgrade the registered plug-in and register the Cisco UCS Provider for Proactive HA. For more information on how to unregister the Cisco UCS Provider, and upgrade the plug-in, seeUnregistering a Cisco UCS Provider, on page 29 and Upgrading Cisco UCS Manager Plug-In for vSphere Web Client.

Enabling Cisco UCS Provider

Before you begin

• Enable vSphere DRS

• From the **vSphere Availability**, enable Proactive HA

• Register all the UCS domains which manage all the hosts in the cluster. To register the domains, see Registering the UCS Domains, on page 6

Procedure

Step 1   Click **Hosts and Clusters** > **Cluster** > **Configure** > **vSphere Availability** > **Edit** > **Proactive HA Failures and Responses**.

Step 2   On the **Proactive HA Failures and Responses** tab, complete the following:

Name	Description

Automation Level drop-down list	Whether to migrate the VMs automatically or manually in case of hosts failure.
	
	 This can be one of the following:
	
	    • **Manual**
	
	    • **Automated**
	
	 We recommend that you select **Automated** level.

Remediation drop-down list	The action to be taken depending on the severity of the failure,
	
	 This can be one of the following:
	
	    • **Quarantine mode for all failures**
	
	    • **Quarantine mode for moderate and Maintenance Mode for sever failures (Mixed)**
	
	    • **Maintenance mode for all failures**
	
	 We recommend that you select **Mixed** mode.

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

Unregistering a Cisco UCS Provider

Procedure

Step 1   Launch the vSphere Web Client.

Step 2   From the home page, launch Cisco UCS plug-in.

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

Step 4   Click **Unregister**.

Modifying Cisco UCS Failure Conditions

Before you begin

- Enable vSphere DRS

- From the **vSphere Availability**, enable Proactive HA

- Register all the UCS domains which manage all the hosts in the cluster. To register the domains, see

Procedure

Step 1	Click **Hosts and Clusters** > **Cluster** > **Configure** > **vSphere Availability** > **Edit** > **Proactive HA Failures and Responses**.
Step 2	From the list of providers, 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**.