



CHAPTER 7

Using a Virtual Machine for Cisco IPICS on a Cisco UCS C-Series Server

This chapter describes how to configure a virtual machine (VM) on a Cisco UCS C-Series server. You can install and operate the Cisco IPICS application, the UMS, or the ISSI Gateway on the VM.

This chapter includes these topics:

- [Prerequisites, page 7-1](#)
- [Obtaining the ISO Image for the Cisco IPICS Operating System, page 7-2](#)
- [Configuring the Virtual Machine, page 7-3](#)

Prerequisites


Before you set up a VM on your Cisco UCS C-Series server, perform the following tasks:

- Make sure that a supported version of VMware ESX or ESXi is installed on your Cisco UCS C-Series server.
- (Optional) Install and configure VMware vCenter Server on your Cisco UCS C-Series server.
- Download the VMware vSphere client application to a local PC. This application is available from the VMware vCenter Server application or from the VMware website.
- Determine the host on which to install the VM.

Obtaining the ISO Image for the Cisco IPICS Operating System

As part of the VM configuration process, you install the Cisco IPICS 4.5 operating system on the VM. Perform the following steps to obtain this operating system and upload it to the Cisco UCS C-Series server:

Procedure

-
- Step 1** Take these actions to download the Cisco IPICS 4.5 operating system ISO image to a client PC that you can access from the Cisco UCS C-Series server:
- On the client PC go to this URL:
<http://www.cisco.com/cisco/software/release.html?mdfid=282977238&flowid=7120&softwareid=282704403&release=4.0.1&rellifecycle=&reind=AVAILABLE&reltype=all>
 - Click the **4.5.1** link under **All Releases > 4**.
 - Click the **Download** button for **ipics-server-4.5_b8-dvd.iso**.
 - Follow the onscreen instructions to download the ISO image to the client PC.
- Step 2** Take these actions to upload the Cisco IPICS 4.5 operating system ISO image from the client PC to the Cisco UCS C-Series server:
- Use the VMware vSphere client application to log in to VMware ESX or ESXi on the Cisco UCS C-Series server.
 - Click Cisco UCS C-Series host on which you will install the VM from the inventory list at the left of the VMware vSphere client application window.
 - Click the **Summary** tab.
 - In the Resources area in the Summary tab, right-click the datastore to which you want to upload the ISO image and choose **Browse Datastore...**
 - From the Datastore Browser window, navigate to the folder to which you want to upload the ISO image, then click the **Upload files to this datastore** icon .
 - Choose **Upload File...**
 - In the Upload Items window, navigate to the location on the Client PC where you saved the Cisco IPICS operating system ISO image file and click **Open**.

- h. If the Upload/Download window appears, click **Yes**.
-

Configuring the Virtual Machine

This section describes how to configure a VM on a Cisco UCS C-Series server.

Before you perform the following procedure, make sure that you perform the procedure that the [“Obtaining the ISO Image for the Cisco IPICS Operating System”](#) section on page 7-2 describes.

Procedure

- Step 1** Use the VMware vSphere client application to log in to VMware ESX or ESXi on the Cisco UCS C-Series server.
- Step 2** Choose **Inventory > Host > New Virtual Machine...**
- Step 3** In the Create New Virtual Machine - Configuration window, take these actions:
 - a. Make sure that the **Typical** radio button is selected.
 - b. Click **Next**.
- Step 4** In the Create New Virtual Machine - Name and Location window, take these actions:
 - a. In the Name field, enter a name for the VM.
 - b. Click **Next**.
- Step 5** In the Create New Virtual Machine - Datastore window, take these actions:
 - a. Choose the datastore in which to save the VM.
 - b. Click **Next**.
- Step 6** In the Create New Virtual Machine - Guest Operating System window, take these actions:
 - a. Click the **Linux** radio button.
 - b. From the Version drop-down list, choose **Red Hat Enterprise Linux 5 (32-bit)**.
 - c. Click **Next**.

- Step 7** If you are using ESXi 5.0, click **Next** in the Network window to accept the default values.
- Step 8** In the Create New Virtual Machine - Create a Disk window, take these actions:
- In the Virtual disk size field, enter the disk size for the VM.
Enter a value of at least 26 GB for the virtual disk size.
 - Check the **Allocate and commit space on demand (Thin Provisioning)** check box.
 - Click **Next**.
- Step 9** In the Create New Virtual Machine - Ready to Complete window, take these actions:
- Check the **Edit the virtual machine settings before completion** check box.
 - Click **Continue**.
- Step 10** In the Virtual Machine Properties window, take these actions:
- In the Memory Size field, enter the amount of memory for the VM.
Enter a value of at least 4 GB for memory.
 - If you will install the Cisco IPICS ISSI Gateway on this VM, take these actions to install a second NIC adapter, which is required for the ISSI Gateway:
 - In the Hardware list, click **New NIC (adding)**.
 - Click **Add...**
The Add Hardware window appears.
 - In the Add Hardware window, click **Ethernet Adapter** and then click **Next**.
 - In the Network type window, click **Next** to accept the default value.
 - In the Ready to Complete window, click **Finish**.
 - Click **Finish**.
 - In the Virtual Machine Properties window, click **Finish**.

- Step 11** Take these actions to install the Cisco IPICS 4.5 operating system as a guest operating system on the VM:
- a. Click the VM on which to install the operating system from the inventory list at the left of the VMware vSphere client application window, then choose **Inventory > Virtual Machine > Edit Settings....**
 - b. In the Virtual Machine Properties window, choose the **Hardware** tab.
 - c. In the Hardware tab, click **CD/DVD Drive 1** in the Hardware list.
 - d. In the Device Type area, click the **Datastore ISO File** check box and click **Browse**.
 - e. In the Browse window, navigate to the location on the Cisco UCS C-Series server where you uploaded the Cisco IPICS operating system ISO image, click the name of the ISO image, and then click **OK**.
 - f. In the Device Status area, check the **Connect at power on** check box.
 - g. Click **OK**.
 - h. Click the **Console** tab.
 - i. Choose **Inventory > Virtual Machine > Power > Power On**.
The VM machine powers on and boots from the operating system ISO image.
 - j. When you see the prompt that asks if you want to continue installing the operating system, type **y** and press **Enter**.
 - k. When you see the screen that displays “Congratulations, the installation is complete,” click **Reboot**.
 - l. When the Welcome window appears, perform the procedure that the [“Configuring Server Parameters on the Multiservices Platform Series Server”](#) section on page 2-10 describes, beginning with [Step 4](#).

You can now install the Cisco IPICS application, the UMS, or the ISSI Gateway on the VM.
