

CHAPTER **5**

Update Manager

This chapter describes how to perform routine device update management tasks using the Administrator Console. It provides information on managing the device updates in your Cisco VXC Manager system and the schedules for synchronizations between Remote Repositories and the Master Repository.

Managing the Schedules for Device Updates

Click **Update Manager** in the tree pane of the Cisco VXC Manager Administrator Console to open the Update Manager. The Update Manager allows you to quickly view and manage the device updates (schedules of the Cisco VXC Manager packages registered in the Cisco VXC Manager database that are ready to be distributed to devices) within your Cisco VXC Manager environment (see Table 5-1). It also allows you to view and manage the schedules for synchronizations between Remote Repositories and the Master Repository.



Figure 5-1 Update Manager

Before using the Update Wizard to schedule device updates, you should understand the update distribution process and the contents of the registered Cisco VXC Manager packages, know the identity of the Cisco VXC Manager packages that you want to distribute, and ensure that the devices to which you will be pushing images or configurations are recognized by the Cisco VXC Manager system (for

example, they have been discovered by Cisco VXC Manager). After the Cisco VXC Manager packages in the Cisco VXC Manager database are scheduled for distribution, they will be distributed as updates to the devices within your Cisco VXC Manager network according to your schedules and preferences.

<u>}</u> Tip

If you intend to perform Cisco VXC Manager package registration and scheduling for all of the devices in your Cisco VXC Manager system at the same time, the Cisco VXC Manager Mass Imaging Tool can be a convenient way for you to easily perform these tasks (see Using the Cisco VXC Manager Mass Imaging Tool, page D-17).

Table 5-1 provides a quick overview of what you can do using the Update Manager.

Table 5-1Routine Update Manager Tasks

Tasks You Can Do	How	Details
Use the Package Distribution Wizard to schedule a registered Cisco VXC Manager package so that it will be distributed as an update.	In the tree pane of the Administrator Console, expand Update Manager , right-click Scheduled Packages , and then choose New > Update to open and use the Package Distribution Wizard.	Scheduling Device Updates Using the Package Distribution Wizard, page 5-32
Use the Drag-and-Drop method to schedule a registered Cisco VXC Manager package so that it will be distributed as an update (useful for environments with a large number of devices and Views).	Complete the instructions in Scheduling Device Updates Using the Drag-and-Drop Method, page 5-35.	Scheduling Device Updates Using the Drag-and-Drop Method, page 5-35
Use the Default Device Configuration method to schedule a registered Cisco VXC Manager package so that it will be distributed as an update (useful if you have a group of devices that have the same OS and media size on which you want to enforce your specified configurations automatically).	Complete the instructions in Scheduling Device Updates Using the Default Device Configuration, page 5-36.	Scheduling Device Updates Using the Default Device Configuration, page 5-36
View the schedules of Cisco VXC Manager packages that will be distributed as updates.	In the tree pane of the Administrator Console, expand Update Manager and click Scheduled Packages (the details pane displays any scheduled and in-progress device updates).	
Change a previously scheduled update or recurring update (the schedule of a Cisco VXC Manager package that will be distributed as an update).	In the tree pane of the Administrator Console, expand Update Manager and click Scheduled Packages . In the details pane, right-click the previously scheduled or recurring update and choose Properties to open and use the Edit Updatesor Recurring Scheduler dialog box.	Changing a Scheduled Device Update for a Cisco VXC Manager Package, page 5-37

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Tasks You Can Do	How	Details
Delete a previously scheduled update (the schedule of a Cisco VXC Manager package that will be distributed as an update).	In the tree pane of the Administrator Console, expand Update Manager and choose Scheduled Packages . In the details pane, right-click the previously scheduled update, choose Delete , and then confirm the deletion. Tip You can use Ctrl-click or Shift-click to choose multiple Cisco VXC Manager packages.	You cannot delete in-progress device updates for a Cisco VXC Manager package. Tip If you have an in-progress update that cannot be fulfilled (for example, a device problem), you can move the update to an error state (right-click on the update and choose Move to
Choose an Update Manager View (a default or one that you created) to use with Scheduled Packages so you can quickly find the devices you want.	In the tree pane of the Administrator Console, expand Update Manager , right-click Scheduled Packages , and then choose Switch View to open and use the Select Current Manager View dialog box.	Error) and then delete it. After creating Views according to your device Group Types, Networks, and so on, selecting a Current Manager View makes it easy to view the devices you want (see Managing Views, page 7-63).
Use the Remote Software Repository Synchronization Wizard to manually schedule a synchronization.	In the tree pane of the Administrator Console, expand Update Manager , right-click Software Repository Synchronization , and then choose New > Remote SW Repository Synch to open the Remote Software Repository Synchronization Wizard.	Manually Scheduling a Synchronization (Using the Remote Software Repository Synchronization Wizard), page 5-39
Set up or change an automatic synchronization.	Complete the instructions in Configuring an Automatic Synchronization, page 5-39.	 Configuring an Automatic Synchronization, page 5-39 Note Automatic synchronization is the default set during installation. Use these instructions if you ever need to change a manual synchronization schedule back to an automatic schedule, or simply need to change the time settings on your current automatic schedule.
View the schedules of remote repository synchronizations.	In the tree pane of the Administrator Console, expand Update Manager and click Software Repository (the details pane displays any scheduled, error-state, or in-progress remote repository synchronizations).	

Table 5-1 Routine Update Manager Tasks (continued)

Tasks You Can Do	How	Details
Change the schedule of a remote repository synchronization.	In the tree pane of the Administrator Console, expand Update Manager and click Software Repository Synchronization . In the details pane, right-click the scheduled synchronization and choose Properties to open and use the Synchronize Remote Software Repository dialog box.	Changing a Remote Software Repository Synchronization, page 5-42
Delete a previously scheduled remote repository synchronization.	In the tree pane of the Administrator Console, expand Update Manager and click Software Repository Synchronization . In the details pane, right-click the previously scheduled synchronization, choose Delete , and then confirm the deletion.	You cannot delete in-progress remote repository synchronizations.

Table 5-1 Routine Update Manager Tasks (continued)

Scheduling Device Updates Using the Package Distribution Wizard

Use the following procedure to schedule updates using the Package Distribution Wizard.

Procedure

Step 1 In the tree pane of the Administrator Console, expand Update Manager, right-click Scheduled Packages, choose Switch View to open the Update Manager View dialog box, choose the view that contains the group or groups of devices you want to receive the update, and then click OK (note that you can use New to create a new view).





Step 2 In the tree pane of the Administrator Console, right-click **Scheduled Packages** and choose **New** > **Update** to open the Package Distribution Wizard.



Figure 5-3 Package Distribution Wizard

Step 3 Choose the folder that contains the registered Cisco VXC Manager package you want to distribute and click **Next**.

Note	

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Only images that support the operating system and flash size of the previously selected device groups view will be displayed.

Figure 5-4	Choose t	the Cisco	VXC Manager	Package
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Figure 5-5 Ch	oose Client Groups
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Package Distrib	ution Wizard 🛛 🔀
010 .011 1010 110	Select the group containing the device(s) you wish to distribute the package to.
?	< <u>B</u> ack <u>N</u> ext > Cancel

Step 5 Choose the group of devices you want to receive the update (to choose all of the groups in the hierarchy, choose **Device Manager** at the top of the hierarchy) and click **Next**.

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Tip	The device groups you see depend on the Update Manager View you selected in Step 1.

Figure 5-6 Choose Clients

Package Distribution Wizard Please select the device(s) to which you want to distribute the s choose all devices in the list.	elected package. Click the 'Select All' button to
Search Criteria Field(s)	Selected Devices
Name LAN MAC Address Active IP Addr LAN MAC Address Active IP Addr LAN MAC Address Active IP Addr LAN MAC Address Active IP Addr	Name ThreadXTest
I	
Recurring Update Select	All Select All
3	<back next=""> Cancel 8</back>

- Step 6 Choose the devices you want to receive the update (you can use Ctrl-click or Shift-click to choose multiple devices; or click Select All if you want to choose all of the devices in the list), check or uncheck the Recurring Update check box (allowing you to schedule on a recurring basis), and click Next.
- Step 7 Depending on whether or not any of the devices you selected are serviced by a Remote Repository (for example, the Cisco VXC Manager package with the update is contained in a Remote Repository), complete one of the following:
 - If no, the wizard prompts you to choose when the update or recurrence pattern should occur. Choose the time and date for the update, click **Next**, and then continue with Step 8.

- If yes, and you have set up your preferences to synchronize Remote Repositories, the wizard prompts you for the synchronization information. Enter the information, click **Next**, and then continue with Step 8.
- **Step 8** When prompted to create the updates click **Next**.
- Step 9 After the wizard notifies you that the updates have been created, click Finish.

Scheduling Device Updates Using the Drag-and-Drop Method



This section is not applicable to Cisco VXC 2112/2212 clients running WTOS firmware.

You can use the drag-and-drop method to schedule a registered Cisco VXC Manager package so that it will be distributed as an update (useful for environments with a large number of devices and Views). Drag-and-drop can push only one package at a time to your devices. To push multiple packages to your devices at the same time, you must use DDC.

 \mathcal{P} Tip

You can create the View you want (a folder that includes the devices to which you want to distribute a Cisco VXC Manager package) by using the instructions in Managing Views, page 7-63.

Procedure

- **Step 1** In the tree pane of the Administrator Console, expand **Package Manager** and click the folder that contains the Cisco VXC Manager package you want to distribute so that it is displayed in the details pane.
- Step 2 In the tree pane of the Administrator Console, expand Device Manager so that the folder containing the devices (the View) to which you want to distribute the Cisco VXC Manager package is displayed in the tree pane.
- Step 3 Click and drag the Cisco VXC Manager package you want to distribute from the details pane and drop the Cisco VXC Manager package onto the folder in the tree pane containing the devices (the View) to which you want to distribute the Cisco VXC Manager package.



Figure 5-7 Choose Devices

- Step 4 In the Package Distribution Wizard that appears, choose the devices you want to receive the Cisco VXC Manager package, click the arrow to move them to the Selected Devices list (you can use Ctrl-click or Shift-click to choose multiple devices; or click Select All if you want to choose all of the devices in the list), check or uncheck the Recurring Update check box (allowing you to schedule on a recurring basis for time, day, and range of dates after you click Next; for example, every two weeks on Monday at 3:00 a.m. with no end date), and then click Next.
- Step 5 Depending on whether or not any of the devices you selected are serviced by a Remote Repository (for example, the Cisco VXC Manager package with the update is contained in a Remote Repository), complete one of the following:
 - If no, the wizard prompts you to choose when the update or recurrence pattern should occur. Choose the time and date for the update, click **Next**, and then continue with Step 6.
 - If yes, and you have set up your preferences to synchronize Remote Repositories, the wizard prompts you for the synchronization information. Enter the information, click **Next**, and then continue with step 6.
- **Step 6** When prompted to create the updates click **Next**.
- **Step 7** After the wizard notifies you that the updates have been created, click **Finish**.

After you configure a DDC for Cisco VXC clients, the clients are updated to the selected OS version automatically: either at their regularly scheduled check-in time or according to the update time set in the Device Manager DDC preferences in Configuration Manager. You can also right-click the Cisco VXC client you want to upgrade, and choose **Reboot** to perform a manual upgrade.

Scheduling Device Updates Using the Default Device Configuration

If you have a group of devices that have the same OS and media size, you can assign a Default Device Configuration (DDC) to update the devices automatically. A DDC allows you to set default configurations for a group of devices and ensures that the devices conform to your configurations. That is, if there is any deviation from your default configurations, Cisco VXC Manager reverts the devices

back to your specified configurations automatically (Cisco VXC Manager automatically sends the Cisco VXC Manager packages in the DDC to the devices according to your schedule and without your intervention).

Procedure

Step 1 Identify the devices to which you want to assign a DDC, and create a suitable View to isolate the target devices (a DDC can be applied only to a group of devices that have the same OS and media size).

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	Tip	You can create the View you want (a folder that includes the devices to which you want to distribute a Cisco VXC Manager package) by using the instructions in Managing Views, page 7-63.
Step 2	Identi want	fy the registered Cisco VXC Manager packages (in the Cisco VXC Manager Database) that you to include in the DDC.
	Tip	DDCs also allow you to determine the sequence in which the Cisco VXC Manager packages are distributed to the devices.
Step 3	Use th you w	ne procedures in Managing Default Device Configurations, page 7-66 to create and assign the DDC vant.

Changing a Scheduled Device Update for a Cisco VXC Manager Package

Use the following procedure to change a scheduled device update for a Cisco VXC Manager Package.



Step 2 Right-click the scheduled or recurring device update you want to change and choose **Properties** to open the Edit Updates or **Recurring Scheduler** dialog box.

Edit Update 🛛 🗙	Recurring Scheduler Software Package: EventLog	X
Voi may change that time you wish this update to occur. Please be You may change any complementary updates scheduled to occur after this one. Note that you can only modify updates that are in Pending's taus. Device: ThreadXTest Package: Language Distribution Will Occur Now The Next Time Device Boots (requires device PXE) At a Specific Date and Time Date: 11/14/2011 Time: 3:20:22 PM	Recurring Scheduler Software Package: EventLog Sghedule 3.16:15 PM Time: 3.16:15 PM Pesciription Client list: Paily Regur Every Sunday Monday Thursday Friday Start 11/15/2011 O End agter: 10 occurrences O End by: 1/18/2012	
2 <u>DK</u> Cancel 8	View OK Cancel Remove Recurrence	

Figure 5-8 Edit Updates/Recurring Scheduler

- Step 3 Make your changes (the ability to choose the Next Time the Device Boots option requires that the device supports PXE and that you set up your preferences to allow updates to occur at PXE if you are using PXE-based imaging—see PXE Based Imaging, page D-12).
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 - **Tip** If the scheduled device update is linked to a Remote Repository, you may see two update rows in the details pane of the Software Repository Synchronization window. The first row is for an update to synchronize the Remote Repository with the Master Repository (if necessary). The second row is for the actual update to the devices that are serviced by the Remote Repository. You can edit either or both of these updates. However, you cannot reschedule the synchronization update (between the Remote Repository and the Master Repository) to occur after the update for the corresponding devices.
- Step 4 After completing your changes, click OK.

Scheduling a Remote Repository Synchronization

Cisco VXC Manager packages in Remote Repositories can be synchronized using either of the following methods:

• Configuring an Automatic Synchronization—This is the default set during installation. With Automatic synchronization enabled, the remote repository synchronizes with the master repository when a client device receives an update for a Cisco VXC Manager package that is not included in the repository assigned to the client subnet (see Configuring an Automatic Synchronization, page 5-39).



Cisco VXC 2111/2211 PCOIP devices and Cisco VXC 2112/2212 ICA devices do not support automatic synchronization of Remote Repositories. You must manually schedule a synchronization for these devices.

Automatic Synchronization only occurs when a client requires a package that does not already exist on the Remote Repository for that client. If you configure a package on the Master Repository that is not applicable to clients on a particular subnet, the Remote Repository for that subnet does not perform a synchronization to obtain this package. As such, the contents of a Remote Repository do not always match the Master Repository.

To fully synchronize the Remote Repository to the Master Repository, you can perform a manual synchronization prior to deploying the package.

• Manually Scheduling a Synchronization—Using the Remote Software Repository Synchronization Wizard, you can set up the specific schedules you need (see Manually Scheduling a Synchronization (Using the Remote Software Repository Synchronization Wizard), page 5-39).

Configuring an Automatic Synchronization

By default, Cisco VXC Manager uses automatic synchronization of the Remote Repository with the Master Repository. If you ever need to change a manual synchronization schedule back to an automatic schedule, or simply need to change the time settings on your current automatic schedule, use the following guidelines:

Procedure

Step 1	In the tree pane of the Administrator Console, expand Configuration Manager , and then click Preferences .
Step 2	In the details pane, double-click Scheduling Preferences to open the Preferences dialog box.
Step 3	In the left pane of the Preferences dialog box, click Scheduling to open the Scheduling Preferences dialog box.
Step 4	Enter the general scheduling preferences you want (see Scheduling Preferences, page 7-83).
Step 5	Check the Auto-synch Remote Software Repository check box and set the Max. Retry Count you want (5 is generally recommended).
Step 6	Choose the Imaging Option you want (see Scheduling Preferences, page 7-83).
Step 7	Click OK.

Manually Scheduling a Synchronization (Using the Remote Software Repository Synchronization Wizard)

Use the following procedure to manually schedule a synchronization.

Procedure

Step 1 In the tree pane of the Administrator Console, expand Update Manager, right-click Software Repository Synchronization, and then choose New > Remote SW Repository Synch to open the Remote Software Repository Synchronization Wizard.

Figure 5-9

Remote Softwa	re Repository S This Wizard will guide you packages on remote Soft repository. To begin, pleas package you wish to sync	Synchronization through the process of sync ware Repositories with the ma se select the category contain thronize.	NW X hronizing aster ning the
011	Name	Description	
		Agent Update	
	Device Configuration	Device Configuration	
	Dihages	Images Other Packages	
$1010 \\ 1700$			
	<	1111	>
	<u> </u>		
2	< 8	ack <u>N</u> ext >	Cancel

Step 2 Choose the category containing the Cisco VXC Manager package you want to synchronize, and then click **Next**.

Remote Software Repository Synchronization Wizard

Figure 5-10	Choose the Cisco	VXC Manager Package
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Package Distrib	ution Wizard	1 🔀
010	Please select the pac	kage you wish to distribute:
	Name	Description
	😫 CE6HAgentUpg	CE6 HAgent Upgrade (Ver- 4.7.1.2)
	🗐 CENetHagentW	CE NET HAgent Upgrade (Ver- 4.7.1.2)
ТТО.	🔋 LVEHagentUpg	Viance Hagent Upgrade (Ver- 4.2.0-0.4)
	🔋 LXSHagentUpg	LinuxV6 Hagent Upgrade (Ver- 4.2.0-2.0)
1010	SUSELXHAgen	SUSE Linux HAgent Upgrade (Ver- 4.2.0
	WESHAgentUp	WES HAgent Upgrade (Ver- 5.1.1.36)
and and and a second	🍯 XPHagentW	XP HAgent Upgrade (Ver- 5.1.1.36)
1.00		
TTO	<	
	P	
2		< Back Next > Cancel

Step 3 Choose the Cisco VXC Manager package you want to synchronize, and then click Next.

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Remote Softwa	re Repositor	y Synchroni	zation W 🔀
010	Please select the Sof selected package to, repositories in the list. <u>S</u> elect All	tware Repositories you Click the 'Select All' b	wish to distribute the utton to choose all
011	Name Remote Reposit	Import Subnets, I 10.100.219.10	Transfer Type
1010 110			
2		< <u>B</u> ack <u>N</u> ext	> Cancel

Figure 5-11 Choose the Software Repository

Step 4 Choose the repositories to which you want the Cisco VXC Manager package distributed, and then click Next.

Figure 5-12 Choose the Scheduling Options

Remote Softwa	are Repository Synchronization W 🔀
010 011	Please select when you wish to synchronize the selected remote Software Repositories.
1010 110	Synchronization Will Occur Now At a <u>Specific Date and Time</u> Date: 7 /16/2010 Time: 4 :59:56 PM × Retry Failed Updates
3	< Back Mext> Cancel

- Step 5 Choose the scheduling options for the synchronization, and then click Next.
- **Step 6** When prompted to create the schedule click **Next**.
- Step 7 After the wizard notifies you that the schedule has been created, click Finish.
- **Step 8** To verify the repository synchronization is scheduled, navigate to **CiscoVXCManager > Update Manager > Repository Synchronization** and view the synchronization details in the details pane.



Figure 5-13 Repository Synchronization

Changing a Remote Software Repository Synchronization

Use the following procedure to change a remote software repository synchronization.

Procedure

Step 1	In the tree pane of the Administrator Console, expand Update Manager, and then click Software
	Repository Synchronization.

Step 2 The details pane displays any scheduled, error-state, or in-progress repository synchronizations.



Figure 5-14 Software Repository Synchronization

Step 3 Right-click the scheduled repository synchronization you want to change, and then choose **Properties** to open the Edit Synchronize Remote Software Repository dialog box.



ou may change the time	you wish this synchronization to occur.
Package	: checkin
Software Repository	Remote
Synchronization Will	I Occur
Date: 7/3	/2008 V Time: 11:37:44 AM
Retry Failed Upd	lates

Step 4 Make your changes.

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Step 5 After completing your changes, click **OK**.