



CHAPTER 2

Installing the Operating System and Cisco Unity Connection 8.x

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Version 8.x Installation Scenarios

You can use this document to perform the following different installation scenarios:

- Install software on the server. For a Connection cluster, install software on the first (publisher) server.
- For a Connection cluster, install software on the second (subscriber) server.
- Apply a patch while installing software on the server. For a Connection cluster, install a patch during installation of the first (publisher) server.
- For a Connection cluster, apply a patch while installing software on the second (subscriber) server.
- Add a server to create a Connection cluster.

The following sections provide an overview of the high-level tasks that you must perform for each of these installation scenarios. Each high-level task also includes a link to another section of the document, which you can follow for detailed information about the task.



Note

For information about replacing a server or cluster, see the “[Replacing Cisco Unity Connection 8.x Servers or Hard Disks](#)” chapter of the *Reconfiguration and Upgrade Guide for Cisco Unity Connection* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/upgrade/guide/8xcucrugx.html.

Install Software on a Cisco Unity Connection 8.x Server or on the Publisher Server in a Cisco Unity Connection 8.x Cluster

To install software on a Cisco Unity Connection server or on the first (publisher) server when you are configuring a Connection cluster, follow the steps in [Table 2-1](#).

Table 2-1 *Installing Software on a Connection Server or on the Publisher Server*

	Task	For More Information
Step 1	Perform all pre-installation tasks that apply to your site.	For a list of pre-installation tasks, see Table 2-6 on page 2-6 .
Step 2	Follow the procedure to begin installing the software from the DVD to your server.	See the “Starting the Installation” section on page 2-24 .
Step 3	Follow the procedure for performing a basic installation.	See the “Performing the Basic Installation” section on page 2-29 .
Step 4	When the First Node Configuration window displays, choose Yes to configure the new server as the only Connection server or as the publisher server in a Connection cluster.	See Step 10 in the “Performing the Basic Installation” section on page 2-29 .
Step 5	Follow the procedure to configure the server.	See “Configuring the Connection Server or the Publisher Server in a Cisco Unity Connection Cluster” section on page 2-31
Step 6	Perform all post-installation tasks that apply to your site.	For a list of post-installation tasks, see Table 2-8 on page 2-34 .

Install Software on the Subscriber Server (Cisco Unity Connection 8.x Cluster Only)

When you are configuring a Cisco Unity Connection cluster, to install software on the second (subscriber) server in the cluster, follow the steps in [Table 2-2](#).

Table 2-2 *Installing Software on the Subscriber Server*

	Task	For More Information
Step 1	Perform all pre-installation tasks that apply to your site.	For a list of pre-installation tasks, see Table 2-6 .
Step 2	Follow the procedure to begin installing the software from the DVD to your server.	See “Starting the Installation” section on page 2-24 .
Step 3	Follow the procedure for performing a basic installation.	See “Performing the Basic Installation” section on page 2-29 .
Step 4	When the First Node Configuration displays, choose No to configure the new server as the subscriber server in a Connection cluster.	See Step 10 in the “Performing the Basic Installation” section on page 2-29 .
Step 5	Follow the procedure to configure a subscriber server in the cluster.	See the “Configuring the Subscriber Server in a Cisco Unity Connection Cluster” section on page 2-32 .
Step 6	Perform all post-installation tasks that apply to your site.	For a list of post-installation tasks, see Table 2-8 .

Apply a Patch When Installing a Connection 8.x Server or the Publisher Server in a Cisco Unity Connection 8.x Cluster

You can upgrade to a later release by downloading and applying a patch during installation. To apply a patch during installation of a Connection server or the first (publisher) server in a Connection cluster, follow the steps in [Table 2-3](#).

Table 2-3 *Applying a Patch During Installation of a Connection Server or the Publisher Server*

	Task	For More Information
Step 1	Perform all pre-installation tasks that apply to your site.	For a list of pre-installation tasks, see Table 2-6 .
Step 2	Follow the procedure to begin installing the software from the DVD to your server.	See “Starting the Installation” section on page 2-24.
Step 3	Follow the procedure to apply a software patch.	See “Applying a Patch” section on page 2-26.
Step 4	Follow the procedure for performing a basic installation.	See “Performing the Basic Installation” section on page 2-29.
Step 5	When the First Node Configuration window displays, choose Yes to configure the new server as the only Connection server or as the publisher server in a Connection cluster.	See Step 10 in the “Performing the Basic Installation” section on page 2-29.
Step 6	Follow the procedure to configure the publisher server in the cluster.	See the “Configuring the Connection Server or the Publisher Server in a Cisco Unity Connection Cluster” section on page 2-31.
Step 7	Perform all post-installation tasks that apply to your site.	For a list of post-installation tasks, see Table 2-8 .

Apply a Patch When Installing the Subscriber Server (Cisco Unity Connection 8.x Cluster Only)

You can upgrade to a later release by downloading and applying a patch during installation. To apply a patch during installation of the second (subscriber) server in a Cisco Unity Connection cluster, follow the steps in [Table 2-4](#).

Table 2-4 *Applying a Patch During Installation of the Subscriber Server*

	Task	For More Information
Step 1	Perform all pre-installation tasks that apply to your site.	For a list of pre-installation tasks, see Table 2-6 .
Step 2	Follow the procedure to begin installing the software from the DVD to your server.	See “Starting the Installation” section on page 2-24.
Step 3	Follow the procedure to apply a software patch.	See “Applying a Patch” section on page 2-26.
Step 4	Follow the procedure for performing a basic installation.	See “Performing the Basic Installation” section on page 2-29.
Step 5	When the First Node Configuration displays, choose No to configure the new server as the subscriber server in a Connection cluster.	See Step 10 in the “Performing the Basic Installation” section on page 2-29.

Table 2-4 Applying a Patch During Installation of the Subscriber Server (continued)

	Task	For More Information
Step 6	Follow the procedure to configure a subscriber server in the cluster.	See the “Configuring the Subscriber Server in a Cisco Unity Connection Cluster” section on page 2-32.
Step 7	Perform all post-installation tasks that apply to your site.	For a list of post-installation tasks, see Table 2-8.

Add a Server to Create a Cisco Unity Connection 8.x Cluster

To add a server to create a Connection cluster, follow the steps in Table 2-5.

Table 2-5 Adding a Server to Create a Cisco Unity Connection Cluster

	Task	For More Information
Step 1	Before you make any changes to your Connection system, be sure that you have a current backup file.	For more information, refer to the <i>Disaster Recovery System Administration Guide</i> .
Step 2	Perform all pre-installation tasks that apply to your site.	For a list of pre-installation tasks, see Table 2-6.
Step 3	Obtain a Cisco Unity Connection cluster license to support adding a subscriber server.	For more information, see the “Managing Licenses in Cisco Unity Connection 8.x” chapter of the <i>System Administration Guide for Cisco Unity Connection</i> at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/administration/guide/8xcucsagx.html .
Step 4	Before you install the subscriber server, ensure that you have configured the Connection cluster on the publisher server.	For more information, see the “Configuring a Cisco Unity Connection 8.x Cluster” chapter of the <i>Cluster Configuration and Administration Guide for Cisco Unity Connection</i> at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/cluster_administration/guide/8xcuccagx.html .
Step 5	Record the configuration settings for each server that you plan to install.	To record your configuration settings, see Table 2-6 on page 2-16.
Step 6	You must install the same software version on the publisher and subscriber servers. If you do not have the correct version on DVD, you need to either download updated software from Cisco.com or follow the procedure for applying a patch during the installation procedure.	
Step 7	Follow the procedure to begin installing the software from the DVD to your server.	See “Starting the Installation” section on page 2-24.
Step 8	If you need to upgrade the version of Cisco Unity Connection that you have on DVD, continue with the procedure for applying a software patch.	See the “Applying a Patch” section on page 2-26.
Step 9	Follow the procedure for performing the basic installation.	See “Performing the Basic Installation” section on page 2-29.
Step 10	When the First Node Configuration displays, choose No to configure the new server as a subscriber server.	See Step 10 in the “Performing the Basic Installation” section on page 2-29.

Table 2-5 Adding a Server to Create a Cisco Unity Connection Cluster (continued)

	Task	For More Information
Step 11	Follow the procedure for configuring a subscriber server.	See the “Configuring the Subscriber Server in a Cisco Unity Connection Cluster” section on page 2-32.
Step 12	Perform all post-installation tasks that apply to your site.	See Table 2-8 on page 2-34.

Parallel Installations of Publisher and Subscriber Servers in a Cisco Unity Connection 8.x Cluster

When you install a Connection cluster, you can begin the installation of the publisher and subscriber servers at the same time. When the installation program prompts you to designate the first server (the publisher server) as the first node, stop installing on the subscriber server until the installation completes on the publisher server. Then configure the Connection cluster on the publisher server. You can then resume the installation on the subscriber server. For optimal performance, you should choose the **Skip** option rather than the **Proceed** option in the installation program.


Version 8.x Pre-Installation Tasks

Table 2-6 contains a list of pre-installation tasks that you need to perform to ensure that you can successfully install Cisco Unity Connection.

Table 2-6 Pre-Installation Tasks

	Task	Important Notes
Step 1	Read this entire document to familiarize yourself with the installation procedure.	
Step 2	Verify the integrity of any new server hardware (such as hard drives and memory) by running any manufacturer-provided utilities.	
Step 3	Ensure that your servers are listed as supported hardware and sized appropriately to support the load of the cluster.	For information about the capacity of server models, see the <i>Cisco Unity Connection 8.x Supported Platforms List</i> at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/supported_platforms/8xcucspl.html . Make sure to account for any growth that has occurred since initial system configuration.

Table 2-6 Pre-Installation Tasks (continued)

	Task	Important Notes
Step 4	<p>For a Connection cluster, if you are getting the system time from an NTP server, verify that the publisher server can synchronize with the NTP server before you install the subscriber server.</p> <p>To verify the NTP status of the publisher server, log into the Command Line Interface on the publisher server and enter the following command:</p> <p>utils ntp status</p>	<p>For more information, see the <i>Command Line Interface Reference Guide for Cisco Unified Solutions</i>.</p> <p> Caution If the publisher server fails to synchronize with an NTP server, installation of a subscriber server can also fail.</p>
Step 5	For a Connection cluster, do not run Network Address Translation (NAT) or Port Address Translation (PAT) between the publisher and subscriber servers.	
Step 6	<p>Record the network interface card (NIC) speed and duplex settings of the switch port to which you will connect the new server.</p> <p>You should configure the same NIC settings on the server and on the switch port. For GigE (1000/FULL), you should set NIC and switch port settings to Auto/Auto; do not set hard values.</p>	Enable PortFast on all switch ports that are connected to Cisco servers. With Portfast enabled, the switch immediately brings a port from the blocking state into the forwarding state by eliminating the forwarding delay [the amount of time that a port waits before changing from its Spanning-Tree Protocol (STP) learning and listening states to the forwarding state].
Step 7	If you use DNS, verify that all servers on which you plan to install Cisco Unity Connection are properly registered in DNS.	For more information, see the “ Changing Reservations on Virtual Machines when Running with E7 Processors ” section on page 2-14.
Step 8	Obtain a Cisco Unity Connection license file.	For more information, see the “ Managing Licenses in Cisco Unity Connection 8.x ” chapter of the <i>System Administration Guide for Cisco Unity Connection</i> at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/administration/guide/8xcucsagx.html .
Step 9	Record the configurations settings for each server that you plan to install.	To record your configuration settings, see Table 2-6 .
Step 10	Configure a Connection cluster on the publisher server before you install the second (subscriber) server.	For more information, see the “ Configuring a Cisco Unity Connection 8.x Cluster ” chapter of the <i>Cluster Configuration and Administration Guide for Cisco Unity Connection</i> at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/cluster_administration/guide/8xcuccagx.html .

Important Considerations for Installing Version 8.x

Before you proceed with the installation, consider the following requirements and recommendations:

- Be aware that when you install on an existing server, the hard drive gets formatted, and all existing data on the drive gets overwritten.
- Ensure that you connect each Cisco Unity Connection server to an uninterruptible power supply (UPS) to provide backup power and protect your system. Failure to do so may result in damage to physical media and require a new installation.

- For a Connection cluster:
 - Install the Cisco Unity Connection software on the publisher server first and then on the subscriber server.
 - When you enter the Security password on the publisher server, write it down and save it. You must enter the same password on the subscriber server.
 - After both servers in the cluster have been installed, confirm that the subscriber server can connect to the publisher server.
 - Install the software during off-peak hours or a maintenance window to avoid impact from interruptions.
 - Both servers in the cluster must run the same release of Cisco Unity Connection. The only exception is during a cluster software upgrade, during which a temporary mismatch is allowed.
- Configure the server by using static IP addressing to ensure that the server obtains a fixed IP address.
- Do not attempt to perform any configuration tasks during the installation.
- Do not install any Cisco-verified applications until you complete the installation.
- Be aware that directory names and filenames that you enter while you are running the installation program are case-sensitive.
- Disk mirroring on server model 7825 I3 with 160 GB SATA disk drives takes approximately 3 hours.
- Disk mirroring on server model 7828 I3 with 250 GB SATA disk drives takes approximately 4 hours.
- Carefully read the information that follows before you proceed with the installation.
- When you insert or remove a USB drive, you might see error messages on the console similar to “sdb: assuming drive cache: write through.” You can safely ignore these messages.

Frequently Asked Questions About the Version 8.x Installation

The following section contains information about commonly asked questions and responses. Review this section carefully before you begin the installation.

How Much Time Does the Installation Require?

The entire installation process, excluding pre- and post-installation tasks, takes 45 to 90 minutes, depending on your server type.

What User Names and Passwords Do I Need to Specify?



Note

The system checks your passwords for strength. For guidelines on creating a strong passwords, see the [“What Is a Strong Password?” section on page 2-10](#).

During the installation, you must specify the following user names and passwords:

- Administrator Account user name and password
- Application User name and password

- Security password

Administrator Account User Name and Password

You use the Administrator Account user name and password to log in to the following areas:

- Cisco Unified Communications Operating System Administration
- Disaster Recovery System
- Command Line Interface

To specify the Administrator Account user name and password, follow these guidelines:

- Administrator Account user name—The Administrator Account user name must start with an alphabetic character and can contain alphanumeric characters, hyphens and underscores.
- Administrator Account password—The Administrator Account password must be at least six characters long and can contain alphanumeric characters, hyphens, and underscores.

You can change the Administrator Account password or add a new Administrator account by using the command line interface. For more information, see the *Command Line Interface Reference Guide for Cisco Unified Solutions*.

Application User Name and Password

You use the Application User name and password to access applications that are installed on the system, including the following areas:

- Cisco Unity Connection Administration
- Cisco Unified Serviceability
- Cisco Unified Real-Time Monitoring Tool

To specify the Application User name and password, follow these guidelines:

- Application User name—The Application User name must start with an alphabetic character and can contain alphanumeric characters, hyphens and underscores.
- Application User password—The Application User password must be at least six characters long and can contain alphanumeric characters, hyphens, and underscores.

You can change the Application User name and password by using the command line interface. For more information, see the *Command Line Interface Reference Guide for Cisco Unified Solutions*.



Note

- Make sure you do not use the following application usernames as this will generate an error:
 - CCMSysUser
 - WDSysUser
 - CCMQRTSysUser
 - IPMASysUser
 - WDSecureSysUser
 - CCMQRTSecureSysUser
 - IPMASecureSysUser
 - TabSyncSysUser
 - CUCService

Security Password

When clustering is configured, the system uses this password to authorize communications between the publisher and subscriber servers; you must ensure that this password is identical on both servers.

The Security password must be at least six characters long and can contain alphanumeric characters, hyphens, and underscores.

What Is a Strong Password?

The installation wizard checks to ensure that you enter a strong password. To create a strong password, follow these recommendations:

- Mix uppercase and lowercase letters.
- Mix letters and numbers.
- Include hyphens and underscores.
- Remember that longer passwords are stronger and more secure than shorter ones.

Avoid the following types of passwords:

- Do not use recognizable words, such as proper names and dictionary words, even when combined with numbers.
- Do not invert recognizable words.
- Do not use word or number patterns, like aaabbb, qwerty, zyxwvuts, 123321, and so on.
- Do not use recognizable words from other languages.
- Do not use personal information of any kind, including birthdays, postal codes, names of children or pets, and so on.

Which Servers Does Cisco Support for this Installation?

For information about supported servers, see the *Cisco Unity Connection 8.x Supported Platforms List* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/supported_platforms/8xcucspl.html.

May I Install Other Software on the Server?

You must do all software installations and upgrades by using Cisco Unified Communications Operating System Administration. The system can upload and process only software that Cisco approved. You cannot install or use unapproved third-party or Windows-based software applications.

Browser Requirements for Version 8.x

You can access Cisco Unified Serviceability, Cisco Unified Communications Operating System Administration, and Disaster Recovery System by using the following browsers:

- Microsoft Internet Explorer version 6.x or version 7.x
- Netscape Navigator version 7.1 or later

For current browser requirements for accessing Cisco Unity Connection Administration and Cisco Unity Connection Serviceability, see the “Software Requirements—Administrator Workstations” section of *System Requirements for Cisco Unity Connection Release 8.x* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/requirements/8xcucsreqs.html.

Installing a Memory Upgrade or Replacing Hard Disks (Selected 8.x Servers Only)

**Note**

If you are installing a server that does not require a memory upgrade or a hard-disk replacement, skip this section.

If you are upgrading an existing Cisco Unity Connection system to version 8.x and you want to retain user data and voice messages, see the applicable chapter of the *Reconfiguration and Upgrade Guide for Cisco Unity Connection Release 8.x* at

http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/upgrade/guide/8xcucrugx.html.

Some servers that are qualified for use with Cisco Unity Connection require:

- A memory upgrade to run Connection 7.x in any configuration.
- A memory upgrade to support a specified number of Connection users when both voice recognition and Digital Networking are configured.
- A hard-disk replacement to support a Connection cluster.

See the applicable server-specific table in the *Cisco Unity Connection 8.x Supported Platforms List* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/supported_platforms/8xcucspl.html.

**Warning**

Before working on a system that has an on/off switch, turn OFF the power and unplug the power cord. Statement 1

**Warning**

Before opening the chassis, disconnect the telephone-network cables to avoid contact with telephone-network voltages. Statement 2

**Warning**

This equipment is to be installed and maintained by service personnel only as defined by AS/NZS 3260 Clause 1.2.14.3 Service Personnel. Statement 88

**Warning**

During this procedure, wear grounding wrist straps to avoid ESD damage to the card. Do not directly touch the backplane with your hand or any metal tool, or you could shock yourself. Statement 94

**Warning**

The safety cover is an integral part of the product. Do not operate the unit without the safety cover installed. Operating the unit without the cover in place will invalidate the safety approvals and pose a risk of fire and electrical hazards. Statement 117

**Warning**

Do not work on the system or connect or disconnect cables during periods of lightning activity.

Statement 1001

**Warning**

Read the installation instructions before connecting the system to the power source. Statement 1004

**Warning**

To prevent bodily injury when mounting or servicing this unit in a rack, you must take special precautions to ensure that the system remains stable. The following guidelines are provided to ensure your safety:

- **This unit should be mounted at the bottom of the rack if it is the only unit in the rack.**
- **When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.**
- **If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack.** Statement 1006

**Warning**

There is the danger of explosion if the battery is replaced incorrectly. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. Statement 1015

**Warning**

This unit is intended for installation in restricted access areas. A restricted access area can be accessed only through the use of a special tool, lock and key, or other means of security.

Statement 1017

**Warning**

To avoid electric shock, do not connect safety extra-low voltage (SELV) circuits to telephone-network voltage (TNV) circuits. LAN ports contain SELV circuits, and WAN ports contain TNV circuits. Some LAN and WAN ports both use RJ-45 connectors. Use caution when connecting cables. Statement 1021

**Warning**

To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord. Statement 1023

**Warning**

This equipment must be grounded. Never defeat the ground conductor or operate the equipment in the absence of a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if you are uncertain that suitable grounding is available. Statement 1024

**Warning**

Blank faceplates and cover panels serve three important functions: they prevent exposure to hazardous voltages and currents inside the chassis; they contain electromagnetic interference (EMI) that might disrupt other equipment; and they direct the flow of cooling air through the chassis. Do not operate the system unless all cards, faceplates, front covers, and rear covers are in place.

Statement 1029

**Warning**

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.
Statement 1030

**Warning**

Ultimate disposal of this product should be handled according to all national laws and regulations.
Statement 1040

(For translations of the preceding safety warnings, see *Regulatory Compliance and Safety Information for Cisco Unity Connection* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/regulatory/compliance/ucwarns.html.)

To Install a Memory Upgrade or Replace Hard Disks (Selected Servers Only)

Step 1 Remove the cover.

Step 2 If you are not installing a memory upgrade, skip to [Step 3](#).

Install the memory modules in the applicable slots or locations, depending on the server model. See the applicable *Cisco Unity Connection Supported Platforms List*.

**Caution**

If you install new memory modules in the wrong slots, the server and operating system may not recognize that the modules have been installed, and Cisco Unity Connection performance may suffer.

Step 3 If you are not replacing hard disks, skip to [Step 4](#).

**Caution**

You must remove existing hard disks and install exactly as many hard disks as you remove, or Cisco Unity Connection installation will fail.

Replace the hard disks:

- a. Make note of the current locations of the hard disks in the server, including which hard disk is in which hard disk slot. If the replacement fails and you want to revert to the current configuration, you must put the existing hard disks back into their current locations.
- b. Remove the drive trays from the server.
- c. Remove the old hard disks from the drive trays.
- d. Insert the new hard disks into the drive trays.
- e. Reinstall the drive trays in the locations that you made note of in [Step a](#).

Step 4 Reattach the cover.

Changing the Boot Order of the Cisco Unity Connection 8.x Virtual Machine

Added April 16, 2010

Do the following procedure to change the BIOS setting so the virtual machine boots first from the DVD virtual device, then from the virtual hard disk.

To Change the Boot Order of the Cisco Unity Connection 8.x Virtual Machine

-
- Step 1** In VMware vSphere Client, power off the virtual machine on which you deployed the OVA template.
 - Step 2** In the left pane of vSphere Client, right-click the name of the virtual machine, and select **Edit Settings**.
 - Step 3** In the Virtual Machine Properties dialog box, select the **Options** tab.
 - Step 4** In the Settings column, under Advanced, select **Boot Options**.
 - Step 5** Under Force BIOS Setup, check the **The Next Time the Virtual Machine Boots, Force Entry into the BIOS Setup Screen** check box.
 - Step 6** Click **OK** to close the Virtual Machine Properties dialog box.
 - Step 7** Power on the virtual machine.
The virtual machine will boot into the BIOS menu.
 - Step 8** Navigate to the Boot menu and change the boot device order so the CD-ROM device is listed first and the Hard Drive device is listed second.
 - Step 9** Save the change and exit BIOS setup.
-

Changing Reservations on Virtual Machines when Running with E7 Processors

Added May 30, 2013

With 8.6(2) and later releases, the CPU reservations are now included in OVA's. The reservation numbers for CPU are based on the Xeon 7500 processor. If the customer chooses to run on the E7 processor, the CPU reservation numbers are higher than available cycles on 1 virtual CPU.

Based on the lab tests, we know that the 2.4 GHz E7 processor has the same performance as a 2.53GHz Xeon 7500 processor. Therefore, it is fine to change the reservation numbers on the virtual machine manually when running them on the E7 processors for 5000, 10,000, or 20,000 deployment options.

For more on the reservations for the E7 processor, see the docwiki available at http://docwiki.cisco.com/wiki/OVA_Template_Details_for_Unity_Connection_Release_8.6.2.

To Change the Reservation Value of the Cisco Unity Connection 8.6(2) or Later Virtual Machine

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- Step 1** In VMware vSphere Client, select the host on which virtual machine is created.
 - Step 2** Click the Summary tab, under **CPU chores**, note the available CPU cycles for 1 virtual CPU in GHz.
 - Step 3** Power off the virtual machine on which you deployed the OVA template
 - Step 4** In the left pane of vSphere Client, right-click the name of the virtual machine, and select Edit Settings.
 - Step 5** In the Virtual Machine Properties dialog box, select the Resources tab.
 - Step 6** In the Settings column, select CPU.

- Step 7** Under Resource Allocation, enter the new reservation value in the Reservation textbox. The new reservation value will be calculated as number of CPUs multiply by the 1 virtual CPU cycles in GHz (from step 2).
- Step 8** Click OK to close the Virtual Machine Properties dialog box
- Step 9** Power on the virtual machine.

Changing Reservations on Virtual Machines when Running with E5440 Processors

With 8.6(2) and later releases, the CPU reservations are now included in OVA's. The reservation numbers for CPU are based on the Xeon 7500 processor. If the customer chooses to run on the E5440 processor, the CPU reservation numbers are higher than available cycles on 1 virtual CPU.

Based on the lab tests, we see that the 2.4 GHz reservation on E5540 processor has the same performance as a 2.53GHz Xeon 7500 processor. Therefore, it is fine to change the reservation numbers on the virtual machine manually when running them on the E5440 processors for 5000, 10,000, or 20,000 deployment options.

For more on the reservations for the E5440 processor, see the docwiki available at http://docwiki.cisco.com/wiki/OVA_Template_Details_for_Unity_Connection_Release_8.6.2.

To Change the Reservation Value of the Cisco Unity Connection 8.6(2) or Later Virtual Machine

-
- Step 1** In VMware vSphere Client, select the host on which virtual machine is created.
 - Step 2** Power off the virtual machine on which you deployed the OVA template.
 - Step 3** In the left pane of vSphere Client, right-click the name of the virtual machine, and select Edit Settings.
 - Step 4** In the Virtual Machine Properties dialog box, select the Resources tab.
 - Step 5** In the Settings column, select CPU.
 - Step 6** Under Resource Allocation, enter the new reservation value in the Reservation textbox. The new reservation value will be calculated as number of CPUsX2.4GHz.
 - Step 7** Click OK to close the Virtual Machine Properties dialog box.
 - Step 8** Power on the virtual machine.

Verifying DNS Registration for the 8.x Installation

If you use DNS, verify that all servers to be added are registered in DNS properly by performing the following actions:

Procedure

-
- Step 1** Open a command prompt.
 - Step 2** To ping each server by its DNS name, enter `ping DNS_name`.

Step 3 To look up each server by IP address, enter **nslookup** *IP_address*.

Gathering Information for an 8.x Installation

Revised July 15, 2010

Use [Table 2-6](#) to record the information about your server. Gather this information for a Connection server that is not in a Connection cluster, or for each Connection server that you are installing in a cluster. You may not need to obtain all the information; gather only the information that is pertinent to your system and network configuration. You should make copies of this table and record your entries for each server in a separate table.



Note

Because some of the fields are optional, they may not apply to your configuration. For example, if you choose not to set up an SMTP host during installation, the parameter still displays, but you do not need to enter a value.



Caution

You cannot change some of the fields after installation without reinstalling the software, so be sure to enter the values that you want.

The last column in the table shows whether you can change a field after installation, and if you can, it provides the appropriate Command Line Interface (CLI) command.




Caution

If you are installing Cisco Unity Connection on a virtual machine, changing some of the values listed in [Table 2-6](#) after installation will require you to obtain updated licenses. For more information, see the “[Managing Licenses in Cisco Unity Connection 8.x](#)” chapter of the *System Administration Guide for Cisco Unity Connection* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/administration/guide/8xcucsagx.html.

Server Configuration Data

Parameter	Description	Can Entry Be Changed After Installation?
Administrator ID Your entry:	This field specifies the administrator account user ID that you use for secure shell access to the CLI, for logging into Cisco Unified Communications Operating System Administration and for logging into the Disaster Recovery System.	No, you cannot change the entry after installation. Note After installation, you can create additional administrator accounts, but you cannot change the original administrator account user ID.

Server Configuration Data (continued)

Parameter	Description	Can Entry Be Changed After Installation?
Administrator Password Your entry:	This field specifies the password for the Administrator account, which you use for secure shell access to the CLI, for logging into Cisco Unified Communications Operating System Administration and for logging into the Disaster Recovery System. Ensure the password is at least six characters long; it can contain alphanumeric characters, hyphens, and underscore.	Yes, you can change the entry after installation by using the following CLI command: CLI > set password user admin
Application User Name Your entry:	You use the Application User name as the default user name for applications that are installed on the system, for example, Cisco Unity Connection Administration and Cisco Unity Connection Serviceability.  Caution Do not specify unityconnection as the Application User Name or the installation will fail.	Yes, you can change the entry after installation by using Cisco Unity Connection Administration.
Application User Password Your entry:	You use the Application User password as the default password for applications that are installed on the system, for example, Cisco Unity Connection Administration and Cisco Unity Connection Serviceability.	Yes, you can change the entry after installation by using the following CLI command: CLI > utils cuc reset password
Country Your entry:	From the list, choose the appropriate country for your installation.	No, you cannot change the entry after installation.
DHCP Your entry:	If you want to use DHCP to automatically configure the network settings on your server, choose Yes . If you choose Yes , you do not get prompted for DNS or static configuration settings. If you choose No , you must enter a hostname, IP Address, IP Mask, and Gateway.	Yes, you can change the entry after installation by using the following CLI command: CLI > set network dhcp

Server Configuration Data (continued)

Parameter	Description	Can Entry Be Changed After Installation?
DNS Enable Your entry:	<p>A DNS server resolves a hostname into an IP address or an IP address into a hostname. If you do not have a DNS server, enter No.</p> <p>If you have a DNS server, Cisco recommends that you enter Yes to enable DNS.</p> <p>Note When DNS is not enabled, you should only enter IP addresses (not host names) for all network devices.</p>	<p>Yes, you can change the entry after installation by using the following CLI command:</p> <p>CLI > set network dns</p>
DNS Primary Your entry:	<p>Enter the IP address of the DNS server that you want to specify as the primary DNS server. Enter the IP address in dotted decimal format as ddd.ddd.ddd.ddd.</p> <p>Consider this field mandatory if DNS is set to yes (DNS enabled).</p>	<p>Yes, you can change the entry after installation by using the following CLI command:</p> <p>CLI > set network dns</p>
DNS Secondary (optional) Your entry:	<p>Enter the IP address of the DNS server that you want to specify as the optional secondary DNS server.</p>	<p>Yes, you can change the entry after installation by using the following CLI command:</p> <p>CLI > set network dns</p>
Domain Your entry:	<p>This field represents the name of the domain in which this machine is located.</p> <p>Consider this field mandatory if DNS is set to yes.</p>	<p>Yes, you can change the entry after installation by using the following CLI command:</p> <p>CLI > set network domain</p>
Gateway Address Your entry:	<p>Enter the IP address of the network gateway.</p> <p>If you do not have a gateway, you must still set this field to 255.255.255.255. Not having a gateway may limit you to only being able to communicate with devices on your subnet.</p> <p>If DHCP is set to No, consider this field mandatory.</p>	<p>Yes, you can change the entry after installation by using the following CLI command:</p> <p>CLI > set network gateway</p>
Hostname Your entry:	<p>Enter a host name that is unique to your server.</p> <p>The host name can comprise up to 64 characters and can contain alphanumeric characters and hyphens. The first character cannot be a hyphen.</p> <p>If DHCP is set to No, consider this field mandatory.</p>	<p>Yes, you can change the entry after installation.</p> <p>For information, see the “Renaming Cisco Unity Connection 8.x Servers” chapter of the <i>Reconfiguration and Upgrade Guide for Cisco Unity Connection</i> at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/upgrade/guide/8xcucrugx.html.</p>



Server Configuration Data (continued)

Parameter	Description	Can Entry Be Changed After Installation?
IP Address Your entry:	Enter the IP address of your server. If DHCP is set to No , consider this field mandatory.	Yes, you can change the entry after installation. For information, see the “ Changing the IP Addresses of Cisco Unity Connection 8.x Servers ” chapter of the <i>Reconfiguration and Upgrade Guide for Cisco Unity Connection</i> at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/upgrade/guide/8xcucrux.html .
IP Mask Your entry:	Enter the IP subnet mask of this machine. If DHCP is set to No , consider this field mandatory.	Yes, you can change the entry after installation by using the following CLI command: CLI > set network ip eth0
Location Your entry:	Enter the location of the server. The system uses this information to generate certificate signing requests (CSRs), which are used to obtain third-party certificates. You can enter any location that is meaningful within your organization. Examples include the state or the city where the server is located.	Yes, you can change the entry after installation by using the following CLI command: CLI > set web-security
MTU Size Your entry:	The maximum transmission unit (MTU) represents the largest packet, in bytes, that this host will transmit on the network. Enter the MTU size in bytes for your network. The MTU size that you configure must not exceed the lowest MTU size that is configured on any link in your network. Default: 1500 bytes The MTU setting must be the same on both servers in a cluster.	Yes, you can change the entry after installation by using the following CLI command: CLI > set network mtu
NIC Duplex Your entry:	Choose the duplex mode for the network interface card (NIC), either Full or Half. Note This parameter only displays when you choose not to use Automatic Negotiation.	Yes, you can change the entry after installation by using the following CLI command: CLI > set network nic
NIC Speed Your entry:	Choose the speed for the NIC, either 10 megabits per second or 100 megabits per second. Note This parameter only displays when you choose not to use Automatic Negotiation.	Yes, you can change the entry after installation by using the following CLI command: CLI > set network nic

Server Configuration Data (continued)

Parameter	Description	Can Entry Be Changed After Installation?
NTP Server Your entry:	<p>Enter the hostname or IP address of one or more network time protocol (NTP) servers with which you want to synchronize.</p> <p>You can enter up to five NTP servers.</p> <p>Note To avoid potential compatibility, accuracy, and network jitter problems, the external NTP servers that you specify for the primary node should be NTP v4 (version 4). If you are using IPv6 addressing, external NTP servers must be NTP v4.</p> <p>Note If you are installing Cisco Unity Connection on a virtual machine, you must specify at least one NTP server.</p>	<p>Yes, you can change the entry after installation by using the Cisco Unified Communications Operating System:</p> <p>Settings > NTP Servers</p>
Organization Your entry:	<p>Enter the name of your organization.</p> <p>Tip You can use this field to enter multiple organizational units. To enter more than one organizational unit name, separate the entries with a comma. For entries that already contain a comma, enter a backslash before the comma that is included as part of the entry.</p> <p>Note The value you enter gets used to generate a Certificate Signing Request (CSR).</p>	<p>Yes, you can change the entry after installation by using the following CLI command:</p> <p>CLI > set web-security</p>

Server Configuration Data (continued)

Parameter	Description	Can Entry Be Changed After Installation?
Security Password Your entry:	<p>Servers in the cluster use the security password to communicate with one another.</p> <p>The password must contain at least six alphanumeric characters. It can contain hyphens and underscores, but it must start with an alphanumeric character.</p> <p>Note Save this password. For a Connection cluster, you will be asked to enter the same security password for both the publisher and subscriber servers.</p>	<p>Yes, you can change the entry after installation by using the following CLI command:</p> <p>CLI > set password user security</p> <p> Caution When a Connection cluster is configured, to avoid losing communications between the publisher and subscriber servers, you must change the Security password on both servers and reboot both servers. For more information, see the description of this command in the <i>Command Line Interface Reference Guide for Cisco Unified Solutions</i>.</p>
SMTP Location Your entry:	<p>Enter the hostname or IP address for the SMTP server that is used for outbound e-mail.</p> <p>The hostname can contain alphanumeric characters, hyphens, or periods, but it must start with an alphanumeric character.</p> <p>Note You must fill in this field if you plan to use electronic notification.</p>	<p>Yes, you can change the entry after installation by using the following CLI command:</p> <p>CLI > set smtp</p>
State Your entry:	<p>Enter the state where the server is located.</p> <p>Note The value you enter gets used to generate a Certificate Signing Request (CSR).</p>	<p>Yes, you can change the entry after installation by using the following CLI command:</p> <p>CLI > set web-security</p>
Time Zone Your entry:	<p>This field specifies the local time zone and offset from Greenwich Mean Time (GMT).</p> <p>Choose the time zone that most closely matches the location of your machine.</p> <p> Caution In a cluster, the subscriber server must be configured to use the same time zone as the publisher server.</p>	<p>Yes, you can change the entry after installation by using the following CLI command:</p> <p>CLI > set timezone</p>

Server Configuration Data (continued)

Parameter	Description	Can Entry Be Changed After Installation?
Unit	Enter your unit.	Yes, you can change the entry after installation by using the following CLI command: CLI > set web-security
Your entry:	Note The value you enter gets used to generate a Certificate Signing Request (CSR).	

Using the Cisco Unified Communications Answer File Generator

Cisco Unified Communications Answer File Generator, a web application, generates answer files for unattended installations of Cisco Unity Connection. Individual answer files get copied to the root directory of a USB key or a floppy diskette and are used in addition to the Cisco Unity Connection DVD during the installation process.

The web application supports the following features:

- Allows simultaneous generation and saving of answer files for unattended installs on the publisher server and all subscriber servers.
- Provides syntactical validation of data entries.
- Provides online help and documentation.

The following usage requirements apply:

- The web application supports only fresh installs and does not support upgrades.
- If DHCP client is being used on the publisher server, and subscriber server answer files are also being generated, you must specify the publisher server IP address.

You can access the Cisco Unified Communications Answer File Generator at the following URL:

http://www.cisco.com/web/cuc_afg/index.html

The Cisco Unified Communications Answer File Generator supports Internet Explorer version 6.0 or higher and Mozilla version 1.5 or higher.

**Note**

Cisco requires that you use USB keys that are compatible with Linux 2.4. Cisco recommends that you use USB keys that are preformatted to be compatible with Linux 2.4 for the configuration file. These keys will have a W95 FAT32 format.

Handling Network Errors During the 8.x Installation

During the installation process, the installation program verifies that the server can successfully connect to the network by using the network configuration that you enter. If it cannot connect, a message displays, and you get prompted to select one of the following options:

- **RETRY**—The installation program tries to validate networking again. If validation fails again, the error dialog box displays again.
- **REVIEW (Check Install)**—This option allows you to review and modify the networking configuration. When detected, the installation program returns to the network configuration windows.

Networking gets validated after you complete each networking window, so the message might display multiple times.

- **HALT**— The installation halts. You can copy the installation log files to a USB disk to aid troubleshooting of your network configuration.



Note When Cisco Unity Connection is installed on a virtual machine, USB drives are not supported.

- **IGNORE** —The installation continues. The networking error gets logged. In some cases, the installation program validates networking multiple times, so this error dialog box might display multiple times. If you choose to ignore network errors, the installation may fail.

Installing the New Operating System and 8.x Application

This section describes how to install the operating system and the Cisco Unity Connection application. You install the operating system and application by running one installation program.

- [Navigating Within the Installation Wizard, page 2-23](#)
- [Starting the Installation, page 2-24](#)
- [Entering Preexisting Configuration Information, page 2-26](#)
- [Applying a Patch, page 2-26](#)
- [Performing the Basic Installation, page 2-29](#)
- [Configuring the Connection Server or the Publisher Server in a Cisco Unity Connection Cluster, page 2-31](#)
- [Configuring the Subscriber Server in a Cisco Unity Connection Cluster, page 2-32](#)

Navigating Within the Installation Wizard

For instructions on how to navigate within the installation wizard, see [Table 2-7](#).

Table 2-7 *Installation Wizard Navigation*

To Do This	Press This
Move to the next field	Tab
Move to the previous field	Alt-Tab
Choose an option	Space bar or Enter
Scroll up or down in a list	Up or down arrow
Go to the previous window	Space bar or Enter to choose Back (when available)
Get help information on a window	Space bar or Enter to choose Help (when available)

Starting the Installation

To start the installation, follow this procedure.



Note

If you have a new server with the Cisco Unity Connection software preinstalled, you do not need to reinstall Connection unless you want to reimagine the server with a later product release. You can go directly to the [“Entering Preexisting Configuration Information” procedure on page 2-26](#).

Procedure

-
- Step 1** If you have a USB key with configuration information that the Answer File Generator generated, insert it now.
- Step 2** Insert the installation DVD into the tray and restart the server, so it boots from the DVD. After the server completes the boot sequence, the DVD Found window displays.
- Step 3** To perform the media check, choose **Yes** or, to skip the media check, choose **No**.
The media check checks the integrity of the DVD. If your DVD passed the media check previously, you might choose to skip the media check.
- Step 4** If you choose **Yes** to perform the media check, the Media Check Result window displays. Perform these tasks:
- a. If the Media Check Result displays Pass, choose **OK** to continue the installation.
 - b. If the media fails the Media Check, either download another copy from Cisco.com or obtain another DVD directly from Cisco.
- Step 5** The system installer performs the following hardware checks to ensure that your system is correctly configured. If the installer makes any changes to your hardware configuration settings, you will get prompted to restart your system. Leave the DVD in the drive during the reboot:
- First, the installation process checks for the correct drivers, and you may see the following warning:

```
No hard drives have been found. You probably need to manually choose device drivers
for install to succeed. Would you like to select drivers now?
```

To continue the installation, choose **Yes**.
 - The installation next checks to see whether you have a supported hardware platform. If your server does not meet the exact hardware requirements, the installation process fails with a critical error. If you think this is not correct, capture the error and report it Cisco support.
 - The installation process next verifies RAID configuration and BIOS settings.



Note If this step repeats, choose **Yes** again.

- If the installation program must install a BIOS update, a notification appears telling you that the system must reboot. Press any key to continue with the installation.

After the hardware checks complete, the Product Deployment Selection window displays.

- Step 6** In the Product Deployment Selection window, select the product to install; then, choose **OK**. You can choose from the following options:
- Cisco Unified Communications Manager
 - Cisco Unity Connection

- Cisco Unified Communications Manager Business Edition (includes Cisco Unified Communications Manager and Cisco Unity Connection)



Note The window indicates which products are supported and not supported by your hardware. If only one product is supported, you do not choose which product to install.



Note If one or more products are not supported on your server, that information also appears. If Cisco Unity Connection is listed as not supported on your server, confirm that the server meets Connection 8.x specifications. See the applicable table for your server model in the “Cisco Unity Connection Supported Servers” section of the *Cisco Unity Connection 8.x Supported Platforms List* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/supported_platforms/8xcucpl.html. (If a memory upgrade is required, see the “Installing a Memory Upgrade or Replacing Hard Disks (Selected 8.x Servers Only)” section on page 2-11 before you start the installation again.)

Step 7 If software is currently installed on the server, the Overwrite Hard Drive window opens and displays the current software version on your hard drive and the version on the DVD. Choose **Yes** to continue with the installation or **No** to cancel.



Caution If you choose **Yes** on the **Overwrite Hard Drive** window, all existing data on your hard drive gets overwritten and destroyed.

The Platform Installation Wizard window displays.

Step 8 Choose the applicable option:

- If Cisco Unity Connection software is already installed on the server, click **Skip**, and continue with the “[Entering Preexisting Configuration Information](#)” section on page 2-26.
- If you want to perform a standard installation, click **Proceed**, and continue with this procedure.
- If you want to perform an unattended installation, click **Skip**, and continue with the “[Entering Preexisting Configuration Information](#)” section on page 2-26. For an unattended installation, you provide preexisting configuration information on a USB key or floppy disk.
- If you want to install the software now and configure it later, click **Skip**, and continue with the “[Entering Preexisting Configuration Information](#)” section on page 2-26. This installation method may take more time than other methods.

Step 9 Choose the type of installation to perform by doing the following steps.

In the Apply Additional Release window, choose one of the options:

- To upgrade to a later Service Release of the software during installation, choose **Yes**. Continue with the “[Applying a Patch](#)” section on page 2-26.
- To skip this step, choose **No**.
- To return to the previous window, choose **Back**.

Step 10 In the Basic Install window, choose **Continue** to install the software version on the DVD or configure the preinstalled software. Continue with the “[Performing the Basic Installation](#)” section on page 2-29.

Entering Preexisting Configuration Information

Start here if you have a server that has the product preinstalled or if you chose **Skip** in the Platform Installation Wizard window.

Procedure

-
- Step 1** After the system restarts, the Preexisting Installation Configuration window displays.
- Step 2** If you have preexisting configuration information that the Answer File Generator created, that is stored on a floppy disc or a USB key, insert the disc or the USB key now and choose **Continue**. The installation wizard will read the configuration information during the installation process.



Note If a pop-up window states that the system detected new hardware, press any key and then choose **Install** from the next window.

The Platform Installation Wizard window displays.

- Step 3** To continue with the Platform Installation Wizard, choose **Proceed**.
- Step 4** Choose the type of installation to perform by doing the following steps.
- In the Apply Additional Release window, choose one of the options:
- To upgrade to a later Service Release of the software during installation, choose **Yes**. Continue with the [“Applying a Patch”](#) section on page 2-26.
 - To skip this step, choose **No**.
 - To return to the previous window, choose **Back**.
- Step 5** In the Basic Install window, choose **Continue**. Continue with the [“Performing the Basic Installation”](#) section on page 2-29.
-

Applying a Patch

If you choose **Yes** in the Apply a Patch window, the installation wizard installs the software version on the DVD first and then restarts the system. You must obtain the appropriate upgrade file from Cisco.com before you can upgrade during installation.



Note You can upgrade to any supported higher release, so long as you have a full patch, not an ES or an SR, in which case you can only upgrade to a later service release within the same maintenance release.

You can access the upgrade file during the installation process from either a local disk (DVD) or from a remote FTP or SFTP server.

Procedure

-
- Step 1** The Install Upgrade Retrieval Mechanism Configuration window displays.
- Step 2** Choose the upgrade retrieval mechanism to use to retrieve the upgrade file:

- **SFTP**—Retrieves the upgrade file from a remote server by using the Secure File Transfer Protocol (SFTP). Skip to the “[Upgrading from a Remote Server](#)” section on page 2-27.
 - **FTP**—Retrieves the upgrade file from a remote server by using File Transfer Protocol (FTP). Skip to the “[Upgrading from a Remote Server](#)” section on page 2-27.
 - **LOCAL**—Retrieves the upgrade file from a local DVD. Continue with the “[Upgrading from a Local Disk](#)” section on page 2-27.
-

Upgrading from a Local Disk

Before you can upgrade from a local disk, you must download the appropriate patch file from Cisco.com and use it to create an upgrade DVD. You must create an ISO image on the DVD from the upgrade file. Just copying the ISO file to a DVD will not work.

Procedure

- Step 1** When the Local Patch Configuration window displays, enter the patch directory and patch name, if required, and choose **OK**.
The Install Upgrade Patch Selection Validation window displays.
- Step 2** The window displays the patch file that is available on the DVD. To update the system with this patch, choose **Continue**.
- Step 3** Choose the upgrade patch to install. The system installs the patch, then restarts the system with the upgraded software version running.
After the system restarts, the Preexisting Configuration Information window displays.
- Step 4** To continue the installation, choose **Proceed**.
The Platform Installation Wizard window displays.
- Step 5** To continue the installation, choose **Proceed** or choose **Cancel** to stop the installation.
If you choose **Proceed**, the Apply Patch window displays. Continue with [Step 6](#).
If you choose **Cancel**, the system halts, and you can safely power down the server.
- Step 6** When the Apply Patch window displays, choose **No**.
- Step 7** The Windows Upgrade window displays.
- Step 8** Choose **No** and continue with the “[Performing the Basic Installation](#)” section on page 2-29.
-

Upgrading from a Remote Server

Before you can upgrade from a remote server, you must download the appropriate patch file from Cisco.com to an FTP or SFTP server that the server can access.

Cisco allows you to use any SFTP server product but recommends SFTP products that have been certified with Cisco through the Cisco Technology Developer Partner program (CTDP). CTDP partners, such as GlobalSCAPE, certify their products with specified version of Cisco Unified Communications Manager. For information on which vendors have certified their products with your version of Cisco Unified Communications Manager, refer to <http://www.cisco.com/cgi-bin/ctdp/Search.pl>. For

information on using GlobalSCAPE with supported Cisco Unified Communications versions, refer to <http://www.globalscape.com/gsftps/cisco.aspx>. Cisco uses the following servers for internal testing. You may use one of the servers, but you must contact the vendor for support:

- Open SSH (for Unix systems. Refer to <http://sshwindows.sourceforge.net/>)
- Cygwin (<http://www.cygwin.com/>)
- Titan (<http://www.titanftp.com/>)

**Note**

For issues with third-party products that have not been certified through the CTDP process, contact the third-party vendor for support.

If you chose to upgrade through an FTP or SFTP connection to a remote server, you must first configure network settings so that the server can connect to the network.

Procedure

Step 1 The Auto Negotiation Configuration window displays.

Step 2 The installation process allows you to automatically set the speed and duplex settings of the Ethernet network interface card (NIC) by using automatic negotiation. You can change this setting after installation.

**Note**

To use this option, your hub or Ethernet switch must support automatic negotiation.

- To enable automatic negotiation, choose **Yes**.
The MTU Configuration window displays. Continue with [Step 4](#).
- To disable automatic negotiation, choose **No**. The NIC Speed and Duplex Configuration window displays. Continue with [Step 3](#).

Step 3 If you chose to disable automatic negotiation, manually choose the appropriate NIC speed and duplex settings now and choose **OK** to continue.

The MTU Configuration window displays.

Step 4 In the MTU Configuration window, you can change the MTU size from the operating system default. The maximum transmission unit (MTU) represents the largest packet, in bytes, that this host will transmit on the network. If you are unsure of the MTU setting for your network, use the default value.

**Caution**

If you configure the MTU size incorrectly, your network performance can be affected.

- To accept the default value (1500 bytes), choose **No**.
- To change the MTU size from the operating system default, choose **Yes**, enter the new MTU size, and choose **OK**.

The DHCP Configuration window displays.

Step 5 For network configuration, you can choose to either set up static network IP addresses for the server and gateway or to use Dynamic Host Configuration Protocol (DHCP). Static IP addresses are recommended. If you use DHCP, use static DHCP.

- If you have a DHCP server that is configured in your network and want to use DHCP, choose **Yes**. The installation process attempts to verify network connectivity. Skip to [Step 8](#).
 - If you want to configure static IP addresses for the server, choose **No**. The Static Network Configuration window displays.
- Step 6** If you chose not to use DHCP, enter your static network configuration values and choose **OK**. See [Table 2-6](#) for field descriptions.
- The DNS Client Configuration window displays.
- Step 7** To enable DNS, choose **Yes**, enter your DNS client information, and choose **OK**. See [Table 2-6](#) for field descriptions.
- After the system configures the network and checks for connectivity, the Remote Patch Configuration window displays.
- Step 8** Enter the location and login information for the remote file server. The system connects to the remote server and retrieves a list of available upgrade patches.
- If the upgrade file is located on a Linux or Unix server, you must enter a forward slash at the beginning of the directory path. For example, if the upgrade file is in the patches directory, you must enter `/patches`.
- If the upgrade file is located on a Windows server, remember that you are connecting to an FTP or SFTP server, so use the appropriate syntax, including:
- Begin the path with a forward slash (/) and use forward slashes throughout the path.
 - The path must start from the FTP or SFTP root directory on the server, so you cannot enter a Windows absolute path, which starts with a drive letter (for example, C:).
- The Install Upgrade Patch Selection window displays.
- Step 9** Choose the upgrade patch to install. The system downloads, unpacks, and installs the patch and then restarts the system with the upgraded software version running.
- After the system restarts, the Preexisting Configuration Information window displays.
- Step 10** To continue the installation, choose **Proceed**.
- The Platform Installation Wizard window displays.
- Step 11** To continue the installation, choose **Proceed** or choose **Cancel** to stop the installation.
- If you choose **Proceed**, the Apply Patch window displays. Continue with [Step 12](#).
- If you choose **Cancel**, the system halts, and you can safely power down the server.
- Step 12** When the Apply Patch window displays, choose **No**.
- Step 13** The Windows Upgrade window displays.
- Step 14** Choose **No** and continue with the [“Performing the Basic Installation”](#) section on page 2-29.
-

Performing the Basic Installation

Revised July 15, 2010

Procedure

- Step 1** When the Timezone Configuration displays, choose the appropriate time zone for the server and then choose **OK**.



Caution In a cluster, the subscriber server must be configured to use the same time zone as the publisher server.

The Auto Negotiation Configuration window displays.

Step 2 The installation process allows you to automatically set the speed and duplex settings of the Ethernet network interface card (NIC) by using automatic negotiation. You can change this setting after installation.

- To enable automatic negotiation, choose **Yes** and continue with [Step 5](#).

The MTU Configuration window displays.



Note To use this option, your hub or Ethernet switch must support automatic negotiation.

- To disable automatic negotiation, choose **No** and continue with [Step 3](#).

The NIC Speed and Duplex Configuration window displays.

Step 3 If you chose to disable automatic negotiation, manually choose the appropriate NIC speed and duplex settings now and choose **OK** to continue.

The MTU Configuration window displays.

Step 4 In the MTU Configuration window, you can change the MTU size from the operating system default. The maximum transmission unit (MTU) represents the largest packet, in bytes, that this host will transmit on the network. If you are unsure of the MTU setting for your network, use the default value, which is 1500 bytes.



Caution If you configure the MTU size incorrectly, your network performance can be affected.

- To accept the default value (1500 bytes), choose **No**.
- To change the MTU size from the operating system default, choose **Yes**, enter the new MTU size, and choose **OK**.

The DHCP Configuration window displays.

Step 5 For network configuration, you can choose to either set up a static network IP address for the server or to use Dynamic Host Configuration Protocol (DHCP). Static IP addresses are recommended. If you use DHCP, use static DHCP

- If you have a DHCP server that is configured in your network and want to use DHCP, choose **Yes**. The network restarts, and the Administrator Login Configuration window displays. Skip to [Step 8](#).
- If you want to configure a static IP address for the server, choose **No**. The Static Network Configuration window displays.

Step 6 If you chose not to use DHCP, enter your static network configuration values and choose **OK**. See [Table 2-6](#) for field descriptions.

The DNS Client Configuration window displays.

Step 7 To enable DNS, choose **Yes**, enter your DNS client information, and choose **OK**. See [Table 2-6](#) for field descriptions.

The network restarts by using the new configuration information, and the Administrator Login Configuration window displays.

Step 8 Enter your Administrator login and password from [Table 2-6](#).



Note The Administrator login must start with an alphabetic character, be at least six characters long, and can contain alphanumeric characters, hyphens, and underscores. You will need the Administrator login to log in to Cisco Unified Communications Operating System Administration, the command line interface, and the Disaster Recovery System.

The Certificate Information window displays.

Step 9 Enter your certificate signing request information and choose **OK**.

The First Node Configuration window displays.

Step 10 You can configure this server as the first (publisher) server in a Connection cluster, as the second (subscriber) server in a cluster, or as a server without a Connection cluster.

- To configure this server as the publisher server or as a server without a Connection cluster, choose **Yes** and continue with the “[Configuring the Connection Server or the Publisher Server in a Cisco Unity Connection Cluster](#)” section on page 2-31.
 - To configure this server as the subscriber server, choose **No** and continue with the “[Configuring the Subscriber Server in a Cisco Unity Connection Cluster](#)” section on page 2-32.
-

Configuring the Connection Server or the Publisher Server in a Cisco Unity Connection Cluster

After you finish the basic installation, follow this procedure to configure the server as the publisher server in a Connection cluster or as a server without a Connection cluster.

Procedure

Step 1 The Network Time Protocol Client Configuration window displays.

Cisco recommends that you use an external NTP server to ensure accurate system time on the publisher server. Ensure the external NTP server is stratum 9 or higher (meaning stratum 1-9). The subscriber server will get its time from the publisher server.



Note When you are installing Cisco Unity Connection on a virtual machine, you must specify an external NTP server.

Step 2 Choose whether you want to configure an external NTP server or manually configure the system time.

- To set up an external NTP server, choose **Yes** and enter the IP address, NTP server name, or NTP server pool name for at least one NTP server. You can configure up to five NTP servers, and Cisco recommends that you use at least three. Choose **Proceed** to continue with the installation.

The system contacts an NTP server and automatically sets the time on the hardware clock.



Note If the Test button displays, you can choose **Test** to check whether the NTP servers are accessible.

- To manually configure the system time, choose **No** and enter the appropriate date and time to set the hardware clock. Choose **OK** to continue with the installation.

The Database Access Security Configuration window displays.

Step 3 Enter the Security password from [Table 2-6](#).



Note The Security password must start with an alphanumeric character, be at least six characters long, and can contain alphanumeric characters, hyphens, and underscores. The system uses this password to authorize communications between the publisher and subscriber servers; you must ensure this password is identical on the two servers.

The SMTP Host Configuration window displays.

Step 4 If you want to configure an SMTP server, choose **Yes** and enter the SMTP server name.



Note You must configure an SMTP server to use certain platform features; however, you can also configure an SMTP server later by using the platform GUI or the command line interface.

Step 5 Choose **OK**. The Application User Configuration window displays.

Step 6 Enter the Application User name and password from [Table 2-6](#) and confirm the password by entering it again.

Step 7 Choose **OK**. The Platform Configuration Confirmation window displays.

Step 8 To continue with the installation, choose **OK**; or to modify the platform configuration, choose **Back**.

The system installs and configures the software. The DVD drive ejects, and the server reboots. Do not reinsert the DVD.

Step 9 When the installation process completes, you get prompted to log in by using the Administrator account and password.

Step 10 Complete the post-installation tasks that are listed in the [“Version 8.x Post-Installation Tasks”](#) section on page 2-34.

Configuring the Subscriber Server in a Cisco Unity Connection Cluster

To configure the subscriber server in the cluster, follow these steps.



Caution

You must configure the subscriber server on the publisher server by using Cisco Unity Connection Administration before you install the subscriber server. See the “Configuring a Cisco Unity Connection 8.x Cluster” chapter of the *Cluster Configuration and Administration Guide for Cisco Unity Connection* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/cluster_administration/guide/8xcuccagx.html.

Procedure

- Step 1** If you configured Network Time Protocol on the publisher server, ensure that it is synchronized with an NTP server before you install the subscriber server. From the Command Line Interface on the publisher server, enter **utils ntp status**. Ensure that the output indicates that the server is synchronized with an NTP server.



Note If the publisher server is not synchronized with an NTP server, installation of the subscriber server will fail.



Note When you are installing Cisco Unity Connection on a virtual machine, you must specify an external NTP server.

- Step 2** On the First Node Configuration window, read the Warning and make sure you have correctly configured the publisher server. To continue with the installation of the subscriber server, click **OK**.

The Network Connectivity Test Configuration window displays.

- Step 3** During installation of a subscriber server, the system checks to ensure that the subscriber server can connect to the publisher server.
- To pause the installation after the system successfully verifies network connectivity, choose **Yes**.
 - To continue the installation with a pause, choose **No**.

The First Node Access Configuration window displays.

- Step 4** Enter the connectivity information for the publisher server and choose **OK**.

The system checks for network connectivity.

If you chose to pause the system after the system successfully verifies network connectivity, the Successful Connection to First Node window displays. Choose **Continue**.



Note If the network connectivity test fails, the system always stops and allows you to go back and reenter the parameter information.

The SMTP Host Configuration window displays.

- Step 5** If you want to configure an SMTP server, choose **Yes** and enter the SMTP server name.



Note To use certain operating system features, you must configure an SMTP server; however, you can also configure an SMTP server later by using the operating system GUI or the command line interface.

The Platform Configuration Confirmation window displays.

- Step 6** To start installing the software, choose **OK**, or, if you want to change the configuration, choose **Back**.

- Step 7** When the installation process completes, you get prompted to log in by using the Administrator account and password.

- Step 8** Complete the post-installation tasks that are listed in the “[Version 8.x Post-Installation Tasks](#)” section on page 2-34.

Version 8.x Post-Installation Tasks

After installing Cisco Unity Connection on your server, you must perform some post-installation tasks before you can begin using it. For a list of tasks, see [Table 2-8](#).



Note

To access web applications, you must use a web browser from a computer that has network access to the Cisco Unity Connection server.

Table 2-8 Post-Installation Tasks

Post-Installation Tasks	Important Notes
Log in as the Cisco Unity Connection Application User and change the Application User passwords.	See the “ Changing the Default Application User Passwords ” section on page 2-34.
Install Cisco Unified Real-Time Monitoring Tool.	You can use Cisco Unified Real-Time Monitoring Tool to monitor system health, and view and collect logs. For installation instructions and more information about Cisco Unified Real-Time Monitoring Tool, see the <i>Cisco Unified Real-Time Monitoring Tool Administration Guide</i> .
Activate Cisco Unity Connection feature services that you want to run. Before you activate feature services, you must perform required preactivation tasks. For service activation requirements, refer to the <i>Cisco Unified Serviceability Administration Guide</i> .	Refer to <i>Cisco Unified Serviceability Administration Guide</i> .
Configure the backup settings. Remember to back up your Cisco Unity Connection data daily.	Refer to <i>Disaster Recovery System Administration Guide</i> .
If applicable, configure any network management systems in use at your site.	Refer to the <i>Cisco Unified Serviceability Administration Guide</i> .

Changing the Default Application User Passwords

The installation sets all Application User passwords to the same Application User password that you entered during installation. Cisco recommends that you log in to Cisco Unity Connection Administration and change these passwords. See *Cisco Unity Connection System Administration Guide* for the procedure for changing a password.

Activating Services

Even though all services are installed on the server, you may need to use Cisco Unified Serviceability to manually activate services that you want to run. For service recommendations and more information, see the *Cisco Unified Serviceability Administration Guide*.

Examining Log Files

If you encounter problems with the installation, you may be able to examine the install log files by entering the following commands in Command Line Interface.

To obtain a list of install log files from the command line, enter

```
CLI>file list install *
```

To view the log file from the command line, enter

```
CLI>file view install log_file
```

where *log_file* is the log file name.

You can also view logs by using the Cisco Unified Real-Time Monitoring Tool. For more information on using and installing the Cisco Unified Real-Time Monitoring Tool, refer to the *Cisco Unified Real-Time Monitoring Tool Administration Guide*.

You can get more information about installation events by viewing or downloading the System History log. Refer to the “Working with Trace and Log Central” chapter in the *Cisco Unified Real-Time Monitoring Tool Administration Guide*.

Migrating to Cisco Unity Connection on a Virtual Machine

Added April 16, 2010

For information on migrating to Cisco Unity Connection on a virtual machine, see the “[Migrating from a Cisco Unity Connection Physical Server to a Connection 8.x Virtual Machine](#)” chapter of the *Reconfiguration and Upgrade Guide for Cisco Unity Connection* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/upgrade/guide/8xcucrugx.html.

