



## **Installation Guide for Cisco Unity Connection**

Release 7.x  
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## Preface

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This preface contains the following sections:

- [Audience and Use, page vii](#)
- [Documentation Conventions, page vii](#)
- [Cisco Unity Connection Documentation, page viii](#)
- [Obtaining Documentation and Submitting a Service Request, page viii](#)
- [Cisco Product Security Overview, page viii](#)

## Audience and Use

The *Installation Guide for Cisco Unity Connection* is intended for installers of a Cisco Unity Connection system. If you are configuring access to Microsoft Exchange email messages, or configuring access to Exchange calendar and contact information, you need a working knowledge of Microsoft Exchange.

## Documentation Conventions

**Table 1** Conventions in the Installation Guide for Cisco Unity Connection

Convention	Description
<b>boldfaced text</b>	Boldfaced text is used for: <ul style="list-style-type: none"><li>• Key and button names. (Example: Click <b>OK</b>.)</li><li>• Information that you enter. (Example: Enter <b>Administrator</b> in the User Name box.)</li></ul>
< > (angle brackets)	Angle brackets are used around parameters for which you supply a value. (Example: In your browser, go to https://<Cisco Unity Connection server IP address>/cuadmin.)
- (hyphen)	Hyphens separate keys that must be pressed simultaneously. (Example: Press <b>Ctrl-Alt-Delete</b> .)
> (right angle bracket)	A right angle bracket is used to separate selections that you make in the navigation bar of Cisco Unity Connection Administration. (Example: In Cisco Unity Connection Administration, go to <b>Contacts &gt; System Contacts</b> .)

The *Installation Guide for Cisco Unity Connection* also uses the following conventions:



**Note**

Means reader take note. Notes contain helpful suggestions or references to material not covered in the document.



**Caution**

Means reader be careful. In this situation, you might do something that could result in equipment damage or loss of data.



**Warning**

**Means *reader be warned*. In this situation, you might perform an action that could result in bodily injury.**

(For translations of safety warnings listed in this guide, 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](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/regulatory/compliance/ucwarns.html).)

## Cisco Unity Connection Documentation

For descriptions and URLs of Cisco Unity Connection documentation on Cisco.com, see the *Documentation Guide for Cisco Unity Connection Release 7.x*. The document is shipped with Cisco Unity Connection and is available at

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/roadmap/7xcucdg.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/roadmap/7xcucdg.html).

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

## Cisco Product Security Overview

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

Further information regarding U.S. export regulations may be found at

[http://www.access.gpo.gov/bis/ear/ear\\_data.html](http://www.access.gpo.gov/bis/ear/ear_data.html).



# CHAPTER 1

## Overview of Mandatory Tasks for Installing a Cisco Unity Connection 7.x System

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This chapter contains two task lists. Use the applicable task list, depending on whether you are configuring a Cisco Unity Connection cluster or not:

- [Task List for Installing a Cisco Unity Connection 7.x System \(Without a Connection Cluster\)](#), page 1-1
- [Task List for Installing a Cisco Unity Connection 7.x System with a Connection Cluster Configured](#), page 1-8

## Task List for Installing a Cisco Unity Connection 7.x System (Without a Connection Cluster)



### Note

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If you are planning to configure a Connection cluster, see the [“Task List for Installing a Cisco Unity Connection 7.x System with a Connection Cluster Configured”](#) section on page 1-8 instead.

---

Use the following high-level task list to install the Cisco Unity Connection 7.x system correctly, without a Connection cluster. The tasks reference detailed instructions in the *Installation Guide for Cisco Unity Connection* and in other Cisco Unity Connection documentation as noted. Follow the documentation for a successful installation.

The task list leads you through the complete installation of the Cisco Unity Connection system—from installing and configuring the Connection server; to populating the Connection system with user and call management data; to setting up optional features, such as using IMAP clients to access voice messages; to backing up Connection data.

The list is divided into nine parts:

- [Part 1: Installing and Configuring the Cisco Unity Connection Server](#), page 1-2
- [Part 2: Setting Up Administrator Workstations](#), page 1-3
- [Part 3: Setting Up the Phone System Integration](#), page 1-3
- [Part 4: Populating the System with User and Call Management Data](#), page 1-3
- [Part 5: Configuring the System for Features](#), page 1-6
- [Part 6: Setting Up Networking](#), page 1-7

- [Part 7: Setting Up User Workstations, page 1-7](#)
- [Part 8: Backing Up Cisco Unity Connection Data, page 1-7](#)
- [Part 9: Training, page 1-8](#)

If you are using Digital Networking to connect multiple Connection 7.x servers, do the tasks in Part 1 and Parts 3 through 5 on all of the servers first, then continue with Part 6 and the remainder of the list. (You need to do the tasks in Part 2 only once.)

Some of the tasks apply only to specific situations, and are noted as such. If a task does not apply to your situation, skip it.

## Part 1: Installing and Configuring the Cisco Unity Connection Server

Revised May 11, 2010

1. Verify the following requirements:
  - a. System requirements for the Cisco Unity Connection 7.x system. See *System Requirements for Cisco Unity Connection Release 7.x* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/requirements/7xcucsysreqs.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/requirements/7xcucsysreqs.html).



### Caution

For selected servers and for selected Connection 7.x configurations, a memory upgrade and/or replacement hard disks may be required. To determine whether your server requires a memory upgrade and/or replacement hard disks, see the applicable server-specific table in the *Cisco Unity Connection Supported Platforms List* at [http://www.cisco.com/en/US/products/ps6509/products\\_data\\_sheets\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_data_sheets_list.html).

- b. Requirements for integrating the phone system(s). See the “Requirements” section of the applicable Cisco Unity Connection integration guide(s) at [http://www.cisco.com/en/US/products/ps6509/products\\_installation\\_and\\_configuration\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_installation_and_configuration_guides_list.html).
2. *If you are using languages other than English-United States:* Download the additional Connection language files for the installation. See the “Downloading Connection 7.x Language Files” section in the “Installing Additional Languages on the Cisco Unity Connection 7.x Server” chapter of this guide. (This task list alerts you when to install the language files later in the installation.)
3. *If a memory upgrade and/or replacement hard disks are required:* Upgrade memory and replace hard disks, as applicable. See the “Installing a Memory Upgrade or Replacing Hard Disks (Selected Servers Only)” section in the “Installing the Operating System and Cisco Unity Connection” chapter of this guide.
4. Set up and configure the Cisco Unity Connection server. Begin with the “Installation Scenarios” section in the “Installing the Operating System and Cisco Unity Connection” chapter of this guide.
5. *If you are using languages other than English-United States:* Install the additional Connection language files. See the “Installing Connection 7.x Language Files” section in the “Installing Additional Languages on the Cisco Unity Connection 7.x Server” chapter of this guide.
6. *If you are using Japanese because you want Cisco Unity Connection Administration to be localized:* Download and install the Cisco Unified Communications Manager Japanese locale. See the “Locale Installation” section in the “Software Upgrades” chapter of the applicable *Cisco Unified Communications Operating System Administration Guide* at [http://www.cisco.com/en/US/products/sw/voicew/ps556/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicew/ps556/prod_maintenance_guides_list.html).

7. If you are using additional languages because you want the Cisco Personal Communications Assistant to be localized: Download and install the corresponding Cisco Unified Communications Manager locales. See the “Locale Installation” section in the “Software Upgrades” chapter of the *Cisco Unified Communications Operating System Administration Guide* at [http://www.cisco.com/en/US/products/sw/voicew/ps556/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicew/ps556/prod_maintenance_guides_list.html).

## Part 2: Setting Up Administrator Workstations

8. Configure the browser(s) on administrator workstations to access Cisco Unity Connection web applications. See the “Configuring the Browser on an Administrator Workstation” chapter of the *System Administration Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/administration/guide/7xcucsagx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/administration/guide/7xcucsagx.html).
9. Download and install the Real-Time Monitoring Tool software on administrator workstations. See the “Installing and Configuring Real-Time Monitoring Tool” chapter of the *Cisco Unified Real-Time Monitoring Tool Administration Guide* at [http://www.cisco.com/en/US/products/ps6509/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html).

## Part 3: Setting Up the Phone System Integration

10. Set up the integration between Cisco Unity Connection and the phone system(s). See the applicable Cisco Unity Connection integration guide(s) at [http://www.cisco.com/en/US/products/ps6509/products\\_installation\\_and\\_configuration\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_installation_and_configuration_guides_list.html).
11. Store all of the software that was shipped with Cisco Unity Connection together in a location that is safe and can be readily accessed.

## Part 4: Populating the System with User and Call Management Data

You do many of the tasks in Part 4 by using Cisco Unity Connection Administration. (For information on logging on to Connection Administration and on using it, see the “Accessing and Using Cisco Unity Connection Administration” chapter of the *System Administration Guide*.)

The tasks in Part 4 reference chapters in the following guides, as noted:

- *System Administration Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/administration/guide/7xcucsagx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/administration/guide/7xcucsagx.html).
  - *User Moves, Adds, and Changes Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/user\\_mac/guide/7xcucmacx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/user_mac/guide/7xcucmacx.html).
12. Obtain and install Connection licenses. See the “Managing Licenses” chapter of the *System Administration Guide*.
  13. Familiarize yourself with the following Cisco Unity Connection concepts:
    - a. Call management. See the “Call Management Overview” and “Creating a Call Management Plan” chapters of the *System Administration Guide*.

- b. The Connection conversation and the Custom Keypad Mapping tool, if you plan to use it. See the “[Cisco Unity Connection Conversation](#)” and “[Custom Keypad Mapping Tool](#)” chapters of the *System Administration Guide*.
  - c. User and administrator accounts, templates, classes of service, and roles. See the “[Introduction to Cisco Unity Connection Users and Contacts](#)” and “[Preparing to Add User Accounts](#)” chapters of the *User Moves, Adds, and Changes Guide*.
14. Develop a system plan:
- a. Identify business and nonbusiness hours, and holidays. See the “[Managing Schedules and Holidays](#)” chapter of the *System Administration Guide*.
  - b. Map out a call management plan. See the “[Creating a Call Management Plan](#)” chapter of the *System Administration Guide*.
  - c. Review the default partition and search space, and determine whether new partitions and search spaces are needed. See the “[Managing Partitions and Search Spaces](#)” chapter of the *System Administration Guide*.
  - d. Review the default restriction tables, and determine whether changes or new tables are needed. See the “[Overview: Default Restriction Tables](#)” section in the “[Managing Restriction Tables](#)” chapter of the *System Administration Guide*.
  - e. Determine password and account lockout policies for phone and web-tool access, and the logon policy for web-tool access. See the “[Specifying Password, Logon, and Lockout Policies](#)” chapter of the *System Administration Guide*.
  - f. Determine the number and types of administrator accounts that you need, and the roles to assign to the accounts. See the “[Preparing to Add User Accounts](#)” chapter of the *User Moves, Adds, and Changes Guide*.
  - g. Determine the features that you will enable for users, and whether changes or new templates and classes of service are needed. See the “[Preparing to Add User Accounts](#)” chapter of the *User Moves, Adds, and Changes Guide*.
  - h. Review the default mailbox size quotas, and determine whether changes are needed. See the “[Specifying Mailbox Size Quotas](#)” section in the “[Controlling the Size of Mailboxes](#)” chapter of the *System Administration Guide*.
  - i. Review the default message aging policy, and determine whether changes are needed. See the “[Changing the Message Aging Policy](#)” section in the “[Controlling the Size of Mailboxes](#)” chapter of the *System Administration Guide*.
  - j. Review the default system distribution lists, and determine whether changes or new distribution lists are needed. See the “[Managing System Distribution Lists](#)” chapter of the *System Administration Guide*.
15. *If you are using the Custom Keypad Mapping tool:* Edit the key mappings that are associated with the custom keypad mapping conversations, as applicable. See the “[Custom Keypad Mapping Tool](#)” chapter of the *System Administration Guide*.
16. For the following defaults that you reviewed in Task 14., make changes or create new ones, as applicable:
- a. Schedules. See the “[Managing Schedules and Holidays](#)” chapter of the *System Administration Guide*.
  - b. Partitions and search spaces. See the “[Managing Partitions and Search Spaces](#)” chapter of the *System Administration Guide*.
  - c. Restriction tables. See the “[Managing Restriction Tables](#)” chapter of the *System Administration Guide*.

- d. Password, lockout, and logon policies. See the “[Specifying Password, Logon, and Lockout Policies](#)” chapter of the *System Administration Guide*.
  - e. Classes of service. See the “[Adding, Modifying, or Deleting a Class of Service](#)” chapter of the *User Moves, Adds, and Changes Guide*.
  - f. User templates. See the “[Adding, Modifying, or Deleting a User Template](#)” chapter of the *User Moves, Adds, and Changes Guide*.
  - g. Mailbox size quotas. See the “[Specifying Mailbox Size Quotas](#)” section in the “[Controlling the Size of Mailboxes](#)” chapter of the *System Administration Guide*.
  - h. Message aging policy. See the “[Changing the Message Aging Policy](#)” section in the “[Controlling the Size of Mailboxes](#)” chapter of the *System Administration Guide*.
  - i. System distribution lists. See the “[Managing System Distribution Lists](#)” chapter of the *System Administration Guide*.
17. Test the system configuration:
- a. Add a Connection user account to use as a test account. See the “[Adding Cisco Unity Connection Accounts Individually](#)” chapter of the *User Moves, Adds, and Changes Guide*.
  - b. Use the phone to log on to Connection as the test user, record a name, and set a phone password. Hang up.
  - c. Call Connection and log on as the test user again to confirm that the password, greeting, and conversation version specified for the user are working properly. Confirm that the user inherited the correct class of service by testing any applicable features by phone.
  - d. Log on to the Cisco Personal Communications Assistant (PCA) as the test user. If you gave the test user the required COS rights, confirm that you can browse from the Cisco PCA Home page to the applicable web tools.
  - e. Make corrections to the system configuration as necessary.
18. If you want to synchronize Connection user data with user data in an LDAP directory, configure Connection for integration with the LDAP directory. See the “[Integrating Cisco Unity Connection with an LDAP Directory](#)” chapter of the *System Administration Guide*.
19. Create administrator accounts. See the “[Adding Cisco Unity Connection Accounts Individually](#)” or “[Creating User Accounts from LDAP User Data](#)” chapter of the *User Moves, Adds, and Changes Guide*, as applicable.
20. Create user accounts. See the “[Adding Cisco Unity Connection Accounts Individually](#),” “[Managing User Accounts in Bulk](#),” “[Creating Multiple User Accounts from Cisco Unified Communications Manager Users](#),” or “[Creating User Accounts from LDAP User Data](#)” chapter of the *User Moves, Adds, and Changes Guide*, as applicable.
21. Add individual users to system distribution lists, as needed. See the “[Managing System Distribution List Members](#)” section in the “[Managing System Distribution Lists](#)” chapter of the *System Administration Guide*.
22. Implement, then test the call management plan you mapped out in Task 14.b.:
- a. Create call handlers. See the “[Managing Call Handlers](#)” chapter of the *System Administration Guide*.
  - b. Specify directory handler settings. See the “[Managing Directory Handlers](#)” chapter of the *System Administration Guide*.
  - c. Create interview handlers. See the “[Managing Interview Handlers](#)” chapter of the *System Administration Guide*.

- d. Set up call routing. See the “[Managing Call Routing Tables](#)” chapter of the *System Administration Guide*.

## Part 5: Configuring the System for Features

Most tasks in Part 5 reference chapters in the following guides, as noted:

- *System Administration Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/administration/guide/7xcucsagx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/administration/guide/7xcucsagx.html).
  - *User Moves, Adds, and Changes Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/user\\_mac/guide/7xcucmacx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/user_mac/guide/7xcucmacx.html).
23. *If any users will use an IMAP email client to access or send Connection messages:* Configure settings for IMAP client access to the Connection server. See the “[Configuring IMAP Settings](#)” chapter of the *System Administration Guide*.
  24. *If any users will have access to the Connection web tools or will use an IMAP email client to access or send Connection messages:* If you have not done so already as part of Task 23., secure Cisco PCA and IMAP access to Connection. See the “[Securing Cisco PCA and IMAP Email Client Access to Cisco Unity Connection](#)” chapter of the *System Administration Guide*.
  25. *If any users will have access to calendar information or to Exchange contacts:* Configure the integration. See the “[Creating Calendar Integrations](#)” chapter of the *System Administration Guide*.
  26. *If any users will use Connection to access their email messages in an external message store:* Configure access to the external message store. See the “[Configuring Access to Emails in An External Message Store](#)” chapter of the *System Administration Guide*.
  27. *If users will be using SMTP or SMS message notification devices:* Enable the system to send SMTP or SMS notification messages. See the “[Setting Up SMTP and SMS \(SMPP\) Message Notifications](#)” chapter of the *System Administration Guide*.
  28. *If any users will have access to Cisco Unity Connection Phone View:* Configure the Phone View feature. See the “[Setting Up Phone View](#)” chapter of the *System Administration Guide*.
  29. *If any users will have access to their Connection voice messages through a Cisco Unified client application:* Configure the applicable client:
    - For Cisco Unified Personal Communicator, see the “Access to Voice Messages from the Cisco Unified Personal Communicator” section in the “[Setting Up Features and Functionality That Are Controlled by Class of Service](#)” chapter of the *User Moves, Adds, and Changes Guide*.
    - For Cisco Unified Mobile Communicator, see the “[Creating a Cisco Unified Mobility Advantage Integration](#)” chapter of the *System Administration Guide*.
    - For Cisco Unified Messaging with IBM Lotus Sametime, see the applicable *Release Notes for Cisco Unified Messaging with IBM Lotus Sametime* at [http://www.cisco.com/en/US/products/ps6509/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/ps6509/prod_release_notes_list.html).
  30. *If any users will have access to faxes:* Configure the Cisco Fax Server integration. See the “[Creating a Cisco Fax Server Integration](#)” chapter of the *System Administration Guide*.
  31. *If any administrators or users will have access to the Cisco Unity Connection Broadcast Message Administrator:* Set it up. See the “[Setting Up Broadcast Messaging](#)” chapter of the *System Administration Guide*.

32. If any administrators or users will need access to the Cisco Unity Greetings Administrator to manage greetings over the phone: Set it up. See the “Setting Up the Cisco Unity Greetings Administrator” section in the “Managing Recorded Greetings and Recorded Names” chapter of the *System Administration Guide*.
33. For any additional features and functionality that you have not yet provided, customize individual user account settings as needed. See the “Setting Up Features and Functionality That Are Controlled by User Account Settings” and “Setting Up Features and Functionality That Are Controlled by Class of Service” chapters of the *User Moves, Adds, and Changes Guide*.

## Part 6: Setting Up Networking

34. Set up Digital Networking, if applicable. See the “Using Digital Networking” chapter of the *System Administration Guide*.
35. Set up VPIM Networking, if applicable. See the “Using VPIM Networking” chapter of the *System Administration Guide*.

## Part 7: Setting Up User Workstations

The tasks in Part 7 reference chapters in the *User Workstation Setup Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/user\\_setup/guide/7xcucusx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/user_setup/guide/7xcucusx.html).

36. Set up access to the Cisco PCA. See the “Setting Up Access to the Cisco Personal Communications Assistant” chapter.
37. Set up Media Master playback and recording devices. See the “Setting Up Playback and Recording Devices for the Media Master” chapter.
38. Configure IMAP email accounts to access Connection voice messages. See the “Configuring an Email Account to Access Cisco Unity Connection Voice Messages” chapter. (The “Creating and Configuring an Account in Microsoft Outlook” section includes instructions for configuring Cisco Unity Connection ViewMail for Microsoft Outlook. If you are using Cisco Unity Connection ViewMail for IBM Lotus Notes, see the *Release Notes for Cisco Unity Connection ViewMail for IBM Lotus Notes* at [http://www.cisco.com/en/US/products/ps6509/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/ps6509/prod_release_notes_list.html).)
39. Confirm that users are able to access and use the Connection features that have been enabled for them.

## Part 8: Backing Up Cisco Unity Connection Data

40. See the *Disaster Recovery System Administration Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/products/ps6509/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html).



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**Note** Third-party backup applications are not supported.

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## Part 9: Training

41. Train users, operators, and support desk personnel to use the Cisco Unity Connection system. See the “[User Orientation](#)” and “[Operator and Support Desk Orientation](#)” chapters of the *User Workstation User Setup Guide*.

# Task List for Installing a Cisco Unity Connection 7.x System with a Connection Cluster Configured

**Note**

If you are not planning to configure a Connection cluster, see the “[Task List for Installing a Cisco Unity Connection 7.x System \(Without a Connection Cluster\)](#)” section on page 1-1 instead.

Use the following high-level task list to install the Cisco Unity Connection 7.x system correctly with a Connection cluster configured. The tasks reference detailed instructions in the *Installation Guide for Cisco Unity Connection* and in other Cisco Unity Connection documentation as noted. Follow the documentation for a successful installation.

The task list leads you through the complete installation of the Cisco Unity Connection system—from installing and configuring the Connection servers; to populating the Connection system with user and call management data; to setting up optional features, such as using IMAP clients to access voice messages; to backing up Connection data. The information and settings that you enter on the publisher server are replicated to the subscriber server.

The list is divided into ten parts:

- [Part 1: Installing and Configuring the Connection Publisher Server](#), page 1-9
- [Part 2: Setting Up Administrator Workstations](#), page 1-10
- [Part 3: Configuring the Cluster, and Installing and Configuring the Connection Subscriber Server](#), page 1-10
- [Part 4: Setting Up the Phone System Integration](#), page 1-10
- [Part 5: Populating the System with User and Call Management Data](#), page 1-11
- [Part 6: Configuring the System for Features](#), page 1-14
- [Part 7: Setting Up Networking](#), page 1-15
- [Part 8: Setting Up User Workstations](#), page 1-15
- [Part 9: Backing Up Cisco Unity Connection Data](#), page 1-16
- [Part 10: Training](#), page 1-16

If you are using Digital Networking to connect one or more Connection 7.x clusters to the network, set up the clusters first, then set up Digital Networking. For the first cluster, do the tasks in Parts 1 through 6. For subsequent clusters, do the tasks in Part 1 and Parts 3 through 6. Then continue with Part 7 and the remainder of the list.

Some of the tasks apply only to specific situations, and are noted as such. If a task does not apply to your situation, skip it.

## Part 1: Installing and Configuring the Connection Publisher Server

Revised May 11, 2010

1. Verify the following requirements:
  - a. System requirements for the Cisco Unity Connection 7.x system. See *System Requirements for Cisco Unity Connection Release 7.x* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/requirements/7xcucsysreqs.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/requirements/7xcucsysreqs.html).



### Caution

For selected servers and for selected Connection 7.x configurations, a memory upgrade and/or replacement hard disks may be required. To determine whether your server requires a memory upgrade and/or replacement hard disks, see the applicable server-specific table in the *Cisco Unity Connection Supported Platforms List* at [http://www.cisco.com/en/US/products/ps6509/products\\_data\\_sheets\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_data_sheets_list.html).

- b. Requirements for integrating the phone system(s). See the “Requirements” section of the applicable Cisco Unity Connection integration guide(s) at [http://www.cisco.com/en/US/products/ps6509/products\\_installation\\_and\\_configuration\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_installation_and_configuration_guides_list.html).
2. *If you are using languages other than English-United States:* Download the additional Connection language files for the installation. See the “Downloading Connection 7.x Language Files” section in the “Installing Additional Languages on the Cisco Unity Connection 7.x Server” chapter of this guide. (This task list alerts you when to install the language files later in the installation.)
3. *If a memory upgrade and/or replacement hard disks are required:* Upgrade memory and replace hard disks, as applicable. See the “Installing a Memory Upgrade or Replacing Hard Disks (Selected Servers Only)” section in the “Installing the Operating System and Cisco Unity Connection” chapter of this guide.
4. Set up and configure the Connection publisher server. Begin with the “Installation Scenarios” section in the “Installing the Operating System and Cisco Unity Connection” chapter of this guide.
5. *If you are using languages other than English-United States:* Install the additional Connection language files on the publisher server. See the “Installing Connection 7.x Language Files” section in the “Installing Additional Languages on the Cisco Unity Connection 7.x Server” chapter of this guide.
6. *If you are using Japanese because you want Cisco Unity Connection Administration to be localized:* Download and install the Cisco Unified Communications Manager Japanese locale on the publisher server. See the “Locale Installation” section in the “Software Upgrades” chapter of the applicable *Cisco Unified Communications Operating System Administration Guide* at [http://www.cisco.com/en/US/products/sw/voicew/ps556/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicew/ps556/prod_maintenance_guides_list.html).
7. *If you are using additional languages because you want the Cisco Personal Communications Assistant to be localized:* Download and install the corresponding Cisco Unified Communications Manager locales on the publisher server. See the “Locale Installation” section in the “Software Upgrades” chapter of the *Cisco Unified Communications Operating System Administration Guide* at [http://www.cisco.com/en/US/products/sw/voicew/ps556/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicew/ps556/prod_maintenance_guides_list.html).

## Part 2: Setting Up Administrator Workstations

8. Configure the browser(s) on administrator workstations to access Cisco Unity Connection web applications. See the “[Configuring the Browser on an Administrator Workstation](#)” chapter of the *System Administration Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/administration/guide/7xcucsagx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/administration/guide/7xcucsagx.html).
9. Download and install the Real-Time Monitoring Tool software on administrator workstations. See the “Installing and Configuring Real-Time Monitoring Tool” chapter of the *Cisco Unified Real-Time Monitoring Tool Administration Guide* at [http://www.cisco.com/en/US/products/ps6509/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html).

## Part 3: Configuring the Cluster, and Installing and Configuring the Connection Subscriber Server

Revised May 11, 2010

10. Configure the Cisco Unity Connection cluster. See the “[Configuring a Cisco Unity Connection 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/7x/cluster\\_administration/guide/7xcuccagx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/cluster_administration/guide/7xcuccagx.html).
11. *If a memory upgrade and/or replacement hard disks are required:* Upgrade memory and replace hard disks, as applicable. See the “[Installing a Memory Upgrade or Replacing Hard Disks \(Selected Servers Only\)](#)” section in the “[Installing the Operating System and Cisco Unity Connection](#)” chapter of this guide.
12. Set up and configure the Connection subscriber server. Begin with the “[Installation Scenarios](#)” section in the “[Installing the Operating System and Cisco Unity Connection](#)” chapter of this guide.
13. *If you are using languages other than English-United States:* On the subscriber server, install the same Connection language files that you installed in Task 5.
14. *If you are using Japanese because you want Cisco Unity Connection Administration to be localized:* On the subscriber server, install the Cisco Unified Communications Manager Japanese locale that you installed in Task 6.
15. *If you are using additional languages because you want the Cisco Personal Communications Assistant to be localized:* On the subscriber server, install the same Cisco Unified Communications Manager locales that you installed in Task 7.



### Note

From now on, the information and settings that you enter on the publisher server are replicated to the subscriber server.

## Part 4: Setting Up the Phone System Integration

16. On the publisher server, set up the integration between Cisco Unity Connection and the phone system(s). See the applicable Cisco Unity Connection integration guide(s) at [http://www.cisco.com/en/US/products/ps6509/products\\_installation\\_and\\_configuration\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_installation_and_configuration_guides_list.html).

17. Store all of the software that was shipped with Cisco Unity Connection together in a location that is safe and can be readily accessed.

## Part 5: Populating the System with User and Call Management Data

### Revised May 2009

You do many of the tasks in Part 5 by using Cisco Unity Connection Administration. (For information on logging on to Connection Administration and on using it, see the “[Accessing and Using Cisco Unity Connection Administration](#)” chapter of the *System Administration Guide for Cisco Unity Connection*.)

The tasks in Part 5 reference chapters in the following guides, as noted:

- *System Administration Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/administration/guide/7xcucsagx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/administration/guide/7xcucsagx.html).
  - *User Moves, Adds, and Changes Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/user\\_mac/guide/7xcucmacx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/user_mac/guide/7xcucmacx.html).
  - *Cluster Configuration and Administration Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/cluster\\_administration/guide/7xcuccagx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/cluster_administration/guide/7xcuccagx.html).
18. Obtain and install Connection licenses. Licenses must be installed on the publisher server and on the subscriber server. See the “[Managing Licenses](#)” chapter of the *System Administration Guide*.
  19. Familiarize yourself with the following Cisco Unity Connection concepts:
    - a. Call management. See the “[Call Management Overview](#)” and “[Creating a Call Management Plan](#)” chapters of the *System Administration Guide*.
    - b. The Connection conversation and the Custom Keypad Mapping tool, if you plan to use it. See the “[Cisco Unity Connection Conversation](#)” and “[Custom Keypad Mapping Tool](#)” chapters of the *System Administration Guide*.
    - c. User and administrator accounts, templates, classes of service, and roles. See the “[Introduction to Cisco Unity Connection Users and Contacts](#)” and “[Preparing to Add User Accounts](#)” chapters of the *User Moves, Adds, and Changes Guide*.
  20. Develop a system plan:
    - a. Identify business and nonbusiness hours, and holidays. See the “[Managing Schedules and Holidays](#)” chapter of the *System Administration Guide*.
    - b. Map out a call management plan. See the “[Creating a Call Management Plan](#)” chapter of the *System Administration Guide*.
    - c. Review the default partition and search space, and determine whether new partitions and search spaces are needed. See the “[Managing Partitions and Search Spaces](#)” chapter of the *System Administration Guide*.
    - d. Review the default restriction tables, and determine whether changes or new tables are needed. See the “[Overview: Default Restriction Tables](#)” section in the “[Managing Restriction Tables](#)” chapter of the *System Administration Guide*.
    - e. Determine password and account lockout policies for phone and web-tool access, and the logon policy for web-tool access. See the “[Specifying Password, Logon, and Lockout Policies](#)” chapter of the *System Administration Guide*.

- f. Determine the number and types of administrator accounts that you need, and the roles to assign to the accounts. See the “[Preparing to Add User Accounts](#)” chapter of the *User Moves, Adds, and Changes Guide*.
  - g. Determine the features that you will enable for users, and whether changes or new templates and classes of service are needed. See the “[Preparing to Add User Accounts](#)” chapter of the *User Moves, Adds, and Changes Guide*.
  - h. Review the default mailbox size quotas, and determine whether changes are needed. See the “[Specifying Mailbox Size Quotas](#)” section in the “[Controlling the Size of Mailboxes](#)” chapter of the *System Administration Guide*.
  - i. Review the default message aging policy, and determine whether changes are needed. See the “[Changing the Message Aging Policy](#)” section in the “[Controlling the Size of Mailboxes](#)” chapter of the *System Administration Guide*.
  - j. Review the default system distribution lists, and determine whether changes or new distribution lists are needed. See the “[Managing System Distribution Lists](#)” chapter of the *System Administration Guide*.
21. *If you are using the Custom Keypad Mapping tool:* On the publisher server, edit the key mappings that are associated with the custom keypad mapping conversations, as applicable. See the “[Custom Keypad Mapping Tool](#)” chapter of the *System Administration Guide*.
22. For the following defaults that you reviewed in Task 20., make changes or create new ones, as applicable, on the publisher server:
- a. Schedules. See the “[Managing Schedules and Holidays](#)” chapter of the *System Administration Guide*.
  - b. Partitions and search spaces. See the “[Managing Partitions and Search Spaces](#)” chapter of the *System Administration Guide*.
  - c. Restriction tables. See the “[Managing Restriction Tables](#)” chapter of the *System Administration Guide*.
  - d. Password, lockout, and logon policies. See the “[Specifying Password, Logon, and Lockout Policies](#)” chapter of the *System Administration Guide*.
  - e. Classes of service. See the “[Adding, Modifying, or Deleting a Class of Service](#)” chapter of the *User Moves, Adds, and Changes Guide*.
  - f. User templates. See the “[Adding, Modifying, or Deleting a User Template](#)” chapter of the *User Moves, Adds, and Changes Guide*.
  - g. Mailbox size quotas. See the “[Specifying Mailbox Size Quotas](#)” section in the “[Controlling the Size of Mailboxes](#)” chapter of the *System Administration Guide*.
  - h. Message aging policy. See the “[Changing the Message Aging Policy](#)” section in the “[Controlling the Size of Mailboxes](#)” chapter of the *System Administration Guide*.
  - i. System distribution lists. See the “[Managing System Distribution Lists](#)” chapter of the *System Administration Guide*.
23. Test the system configuration:
- a. On the publisher server, in Cisco Unity Connection Serviceability on the Cluster Management page, confirm that the publisher server has Primary status and the subscriber server has Secondary status. See the “[Administering a Cisco Unity Connection Cluster](#)” chapter of the *Cluster Configuration and Administration Guide for Cisco Unity Connection*.

- b. On the publisher server, add a Connection user account to use as a test account. See the [“Adding Cisco Unity Connection Accounts Individually”](#) chapter of the *User Moves, Adds, and Changes Guide*.
  - c. Use the phone to log on to Connection as the test user, record a name, and set a phone password. Hang up.
  - d. Call Connection and log on as the test user again to confirm that the password, greeting, and conversation version specified for the user are working properly. Confirm that the user inherited the correct class of service by testing any applicable features by phone.
  - e. Log on to the Cisco Personal Communications Assistant (PCA) as the test user. If you gave the test user the required class-of-service rights, confirm that you can browse from the Cisco PCA Home page to the applicable web tools.
  - f. Make corrections to the system configuration as necessary.
  - g. On the subscriber server, confirm that the test user and recorded name have been replicated.
  - h. In Cisco Unity Connection Serviceability on the Cluster Management page, change the status of the subscriber server to Primary. See the [“Manually Changing Server Status”](#) section in the [“Administering a Cisco Unity Connection Cluster”](#) chapter of the *Cluster Configuration and Administration Guide for Cisco Unity Connection*.
  - i. Change the status of the publisher server (which should now have Secondary status) to Deactivated. See the [“Manually Changing Server Status”](#) section in the [“Administering a Cisco Unity Connection Cluster”](#) chapter of the *Cluster Configuration and Administration Guide for Cisco Unity Connection*.
  - j. Call Cisco Unity Connection and log on as the test user again to confirm that the call connects correctly to the subscriber server when it has Primary status. Confirm that the password, greeting, and conversation version specified for the user are working properly. Confirm that the user inherited the correct class of service by testing any applicable features by phone.
  - k. Log on to the Cisco PCA as the test user. Confirm that you can browse from the Cisco PCA Home page to the applicable web tools.
  - l. Make corrections to the system configuration as necessary.
  - m. In Cisco Unity Connection Serviceability on the Cluster Management page, activate the publisher server. See the [“Manually Changing Server Status”](#) section in the [“Administering a Cisco Unity Connection Cluster”](#) chapter of the *Cluster Configuration and Administration Guide for Cisco Unity Connection*.
  - n. Change the status of the publisher server to Primary. See the [“Manually Changing Server Status”](#) section in the [“Administering a Cisco Unity Connection Cluster”](#) chapter of the *Cluster Configuration and Administration Guide for Cisco Unity Connection*.
24. If you want to synchronize Connection user data with user data in an LDAP directory, on the publisher server, configure Connection for integration with the LDAP directory. See the [“Integrating Cisco Unity Connection with an LDAP Directory”](#) chapter of the *System Administration Guide*.
  25. On the publisher server, create administrator accounts. See the [“Adding Cisco Unity Connection Accounts Individually”](#) or [“Creating User Accounts from LDAP User Data”](#) chapter of the *User Moves, Adds, and Changes Guide*, as applicable.
  26. On the publisher server, create user accounts. See the [“Adding Cisco Unity Connection Accounts Individually,”](#) [“Managing User Accounts in Bulk,”](#) [“Creating Multiple User Accounts from Cisco Unified Communications Manager Users,”](#) or [“Creating User Accounts from LDAP User Data”](#) chapter of the *User Moves, Adds, and Changes Guide*, as applicable.

27. On the publisher server, add individual users to system distribution lists, as needed. See the “Managing System Distribution List Members” section in the “Managing System Distribution Lists” chapter of the *System Administration Guide*.
28. On the publisher server, implement, then test the call management plan you mapped out in Task 20.b.:
  - a. Create call handlers. See the “Managing Call Handlers” chapter of the *System Administration Guide*.
  - b. Specify directory handler settings. See the “Managing Directory Handlers” chapter of the *System Administration Guide*.
  - c. Create interview handlers. See the “Managing Interview Handlers” chapter of the *System Administration Guide*.
  - d. Set up call routing. See the “Managing Call Routing Tables” chapter of the *System Administration Guide*.

## Part 6: Configuring the System for Features

For the tasks in Part 6 done on the Cisco Unity Connection system, enter information and settings on the publisher server.

Most tasks reference chapters in the following guides, as noted:

- *System Administration Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/administration/guide/7xcucsagx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/administration/guide/7xcucsagx.html).
  - *User Moves, Adds, and Changes Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/user\\_mac/guide/7xcucmacx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/user_mac/guide/7xcucmacx.html).
29. *If any users will use an IMAP email client to access or send Connection messages:* Configure settings for IMAP client access to the Connection server. See the “Configuring IMAP Settings” chapter of the *System Administration Guide*.
  30. *If any users will have access to the Connection web tools or will use an IMAP email client to access or send Connection messages:* If you have not done so already as part of Task 29., secure Cisco PCA and IMAP access to Connection. See the “Securing Cisco PCA and IMAP Email Client Access to Cisco Unity Connection” chapter of the *System Administration Guide*.
  31. *If any users will have access to calendar information or to Exchange contacts:* Configure the integration. See the “Creating Calendar Integrations” chapter of the *System Administration Guide*.
  32. *If any users will use Connection to access their email messages in an external message store:* Configure access to the external message store. See the “Configuring Access to Emails in An External Message Store” chapter of the *System Administration Guide*.
  33. *If users will be using SMTP or SMS message notification devices:* Enable the system to send SMTP or SMS notification messages. See the “Setting Up SMTP and SMS (SMPP) Message Notifications” chapter of the *System Administration Guide*.
  34. *If any users will have access to Cisco Unity Connection Phone View:* Configure the Phone View feature. See the “Setting Up Phone View” chapter of the *System Administration Guide*.
  35. *If any users will have access to their Connection voice messages through a Cisco Unified client application:* Configure the applicable client:

- For Cisco Unified Personal Communicator, see the “Access to Voice Messages from the Cisco Unified Personal Communicator” section in the “[Setting Up Features and Functionality That Are Controlled by Class of Service](#)” chapter of the *User Moves, Adds, and Changes Guide*.
  - For Cisco Unified Mobile Communicator, see the “[Creating a Cisco Unified Mobility Advantage Integration](#)” chapter of the *System Administration Guide*.
  - For Cisco Unified Messaging with IBM Lotus Sametime, see the applicable *Release Notes for Cisco Unified Messaging with IBM Lotus Sametime* at [http://www.cisco.com/en/US/products/ps6509/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/ps6509/prod_release_notes_list.html).
36. *If any users will have access to faxes:* Configure the Cisco Fax Server integration. See the “[Creating a Cisco Fax Server Integration](#)” chapter of the *System Administration Guide*.
  37. *If any administrators or users will have access to the Cisco Unity Connection Broadcast Message Administrator:* Set it up. See the “[Setting Up Broadcast Messaging](#)” chapter of the *System Administration Guide*.
  38. *If any administrators or users will need access to the Cisco Unity Greetings Administrator to manage greetings over the phone:* Set it up. See the “Setting Up the Cisco Unity Greetings Administrator” section in the “[Managing Recorded Greetings and Recorded Names](#)” chapter of the *System Administration Guide*.
  39. For any additional features and functionality that you have not yet provided, customize individual user account settings as needed. See the “[Setting Up Features and Functionality That Are Controlled by User Account Settings](#)” and “[Setting Up Features and Functionality That Are Controlled by Class of Service](#)” chapters of the *User Moves, Adds, and Changes Guide*.

## Part 7: Setting Up Networking

40. Set up Digital Networking, if applicable, on the publisher server. If you are connecting more than one Connection cluster, set up networking on all publisher servers. See the “[Using Digital Networking](#)” chapter of the *System Administration Guide*.
41. Set up VPIM Networking, if applicable, on the publisher server. If you are connecting more than one Connection cluster, set up networking on all publisher servers. See the “[Using VPIM Networking](#)” chapter of the *System Administration Guide*.

## Part 8: Setting Up User Workstations

The tasks in Part 8 reference chapters in the *User Workstation Setup Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/user\\_setup/guide/7xcucusx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/user_setup/guide/7xcucusx.html).

42. Set up access to the Cisco PCA. See the “[Setting Up Access to the Cisco Personal Communications Assistant](#)” chapter.
43. Set up Media Master playback and recording devices. See the “[Setting Up Playback and Recording Devices for the Media Master](#)” chapter.
44. Configure IMAP email accounts to access Connection voice messages. See the “[Configuring an Email Account to Access Cisco Unity Connection Voice Messages](#)” chapter. (The “Creating and Configuring an Account in Microsoft Outlook” section includes instructions for configuring Cisco Unity Connection ViewMail for Microsoft Outlook. If you are using Cisco Unity Connection ViewMail for IBM Lotus Notes, see the *Release Notes for Cisco Unity Connection ViewMail for IBM Lotus Notes* at [http://www.cisco.com/en/US/products/ps6509/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/ps6509/prod_release_notes_list.html).)

45. Confirm that users are able to access and use the Connection features that have been enabled for them.

## Part 9: Backing Up Cisco Unity Connection Data

46. Do the backup on the publisher server. See the *Disaster Recovery System Administration Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/drs\\_administration/guide/7xcucdrsag.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/drs_administration/guide/7xcucdrsag.html).



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**Note** Third-party backup applications are not supported.

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## Part 10: Training

47. Train users, operators, and support desk personnel to use the Cisco Unity Connection system. See the “[User Orientation](#)” and “[Operator and Support Desk Orientation](#)” chapters of the *User Workstation User Setup Guide*.



## CHAPTER 2

# Installing the Operating System and Cisco Unity Connection

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This chapter contains the following sections:

- [Installation Scenarios, page 2-2](#)
  - [Install Software from a DVD on the First Node \(on a Connection Publisher Server\) or on a Connection Server Without a Connection Cluster, page 2-2](#)
  - [Install Software from a DVD on a Subsequent Node \(on a Connection Subscriber Server\), page 2-3](#)
  - [Apply a Patch During Installation of the First Node \(a Connection Publisher Server\) or of a Connection Server Without a Connection Cluster, page 2-3](#)
  - [Apply a Patch During Installation of a Subsequent Node \(a Connection Subscriber Server\), page 2-4](#)
- [Preinstallation Tasks, page 2-4](#)
- [Important Considerations, page 2-6](#)
- [Frequently Asked Questions About the Installation, page 2-6](#)
  - [How Much Time Does the Installation Require?, page 2-6](#)
  - [What Usernames and Passwords Do I Need to Specify?, page 2-6](#)
  - [What Is a Strong Password?, page 2-7](#)
  - [Which Servers Does Cisco Support for this Installation?, page 2-8](#)
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- [Installing a Memory Upgrade or Replacing Hard Disks \(Selected Servers Only\), page 2-9](#)
- [Configuring the Hardware, page 2-11](#)
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- [Gathering Information for an Installation, page 2-12](#)
- [Using the Cisco Unified Communications Answer File Generator, page 2-18](#)
- [Handling Network Errors During Installation, page 2-18](#)
- [Installing the New Operating System and Application, page 2-19](#)
  - [Navigating Within the Installation Wizard, page 2-19](#)
  - [Starting the Installation, page 2-19](#)

- [Entering Preexisting Configuration Information, page 2-21](#)
- [Applying a Patch, page 2-22](#)
- [Performing the Basic Installation, page 2-25](#)
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- [Configuring a Subsequent Node, page 2-27](#)
- [Postinstallation Tasks, page 2-29](#)
  - [Changing the Default Application User Passwords, page 2-29](#)
  - [Activating Services, page 2-29](#)
  - [Examining Log Files, page 2-29](#)

## Installation Scenarios

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

- Install software from a DVD on the first node
- Install software from a DVD on a subsequent node
- Apply a patch during installation of the first node
- Apply a patch during installation of a subsequent node

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.

### Install Software from a DVD on the First Node (on a Connection Publisher Server) or on a Connection Server Without a Connection Cluster

To install software that you have on a DVD on the first node (on the Connection publisher server) in a cluster or on a Connection server without a Connection cluster, follow the steps in [Table 2-1](#).

**Table 2-1** *Installing Software from a DVD on the First Node*

	Task	For More Information
<b>Step 1</b>	Perform all preinstallation tasks that apply to your site.	For a list of preinstallation tasks, see <a href="#">Table 2-5 on page 2-4</a> .
<b>Step 2</b>	Follow the procedure to begin installing the software on the DVD to your server.	See the “Starting the Installation” section on <a href="#">page 2-19</a> .
<b>Step 3</b>	Follow the procedure for performing a basic installation.	See the “Performing the Basic Installation” section on <a href="#">page 2-25</a> .
<b>Step 4</b>	When the First Node Configuration window displays, choose <b>Yes</b> to configure the new server as the first node.	See <a href="#">Step 10</a> in the “Performing the Basic Installation” section on <a href="#">page 2-25</a> .

**Table 2-1** *Installing Software from a DVD on the First Node (continued)*

	Task	For More Information
<b>Step 5</b>	Follow the procedure to configure the first node.	See “Configuring the First Node” section on page 2-26
<b>Step 6</b>	Perform all postinstallation tasks that apply to your site.	For a list of postinstallation tasks, see Table 2-10 on page 2-29.

## Install Software from a DVD on a Subsequent Node (on a Connection Subscriber Server)

To install software that you have on a DVD on a Connection subscriber server, follow the steps in Table 2-2.

**Table 2-2** *Installing Software from a DVD on a Subsequent Node*

	Task	For More Information
<b>Step 1</b>	Perform all preinstallation tasks that apply to your site.	For a list of preinstallation tasks, see Table 2-5.
<b>Step 2</b>	Follow the procedure to begin installing the software on the DVD to your server.	See “Starting the Installation” section on page 2-19.
<b>Step 3</b>	Follow the procedure for performing a basic installation.	See “Performing the Basic Installation” section on page 2-25.
<b>Step 4</b>	When the First Node Configuration displays, choose <b>No</b> to configure the new server as a subsequent node.	See Step 10 in the “Performing the Basic Installation” section on page 2-25.
<b>Step 5</b>	Follow the procedure to configure a subsequent node in the cluster.	See the “Configuring a Subsequent Node” section on page 2-27.
<b>Step 6</b>	Perform all postinstallation tasks that apply to your site.	For a list of postinstallation tasks, see Table 2-10.

## Apply a Patch During Installation of the First Node (a Connection Publisher Server) or of a Connection Server Without a Connection Cluster

You can upgrade to a later release by downloading and applying a patch during installation. To apply a patch during installation of the first node (a Connection publisher server) or of a Connection server without a Connection cluster, follow the steps in Table 2-3.

**Table 2-3** *Applying a Patch During Installation of the First Node*

	Task	For More Information
<b>Step 1</b>	Perform all preinstallation tasks that apply to your site.	For a list of preinstallation tasks, see Table 2-5.
<b>Step 2</b>	Follow the procedure to begin installing the software on the DVD to your server.	See “Starting the Installation” section on page 2-19.
<b>Step 3</b>	Follow the procedure to apply a software patch.	See “Applying a Patch” section on page 2-22.
<b>Step 4</b>	Follow the procedure for performing a basic installation.	See “Performing the Basic Installation” section on page 2-25.

**Table 2-3** *Applying a Patch During Installation of the First Node (continued)*

	Task	For More Information
<b>Step 5</b>	When the First Node Configuration window displays, choose <b>Yes</b> to configure the new server as the first node.	See <a href="#">Step 10</a> in the “Performing the Basic Installation” section on page 2-25.
<b>Step 6</b>	Follow the procedure to configure the first node in the cluster.	See the “Configuring the First Node” section on page 2-26.
<b>Step 7</b>	Perform all postinstallation tasks that apply to your site.	For a list of postinstallation tasks, see <a href="#">Table 2-10</a> .

## Apply a Patch During Installation of a Subsequent Node (a Connection Subscriber Server)

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

**Table 2-4** *Applying a Patch During Installation of a Subsequent Node*

	Task	For More Information
<b>Step 1</b>	Perform all preinstallation tasks that apply to your site.	For a list of preinstallation tasks, see <a href="#">Table 2-5</a> .
<b>Step 2</b>	Follow the procedure to begin installing the software on the DVD to your server.	See “Starting the Installation” section on page 2-19.
<b>Step 3</b>	Follow the procedure to apply a software patch.	See “Applying a Patch” section on page 2-22.
<b>Step 4</b>	Follow the procedure for performing a basic installation.	See “Performing the Basic Installation” section on page 2-25.
<b>Step 5</b>	When the First Node Configuration window displays, choose <b>No</b> to configure the new server as a subsequent node.	See <a href="#">Step 10</a> in the “Performing the Basic Installation” section on page 2-25.
<b>Step 6</b>	Follow the procedure to configure a subsequent node in the cluster.	See the “Configuring a Subsequent Node” section on page 2-27.
<b>Step 7</b>	Perform all postinstallation tasks that apply to your site.	For a list of postinstallation tasks, see <a href="#">Table 2-10</a> .


## Preinstallation Tasks

[Table 2-5](#) contains a list of preinstallation tasks that you need to perform to ensure that you can successfully install Cisco Unity Connection.

**Table 2-5** *Preinstallation Tasks*

	Task	Important Notes
<b>Step 1</b>	Read this entire document to familiarize yourself with the installation procedure.	
<b>Step 2</b>	Verify the integrity of any new server hardware (such as hard drives and memory) by running any manufacturer-provided utilities.	

Table 2-5 Preinstallation Tasks (continued)

	Task	Important Notes
<b>Step 3</b>	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 Supported Platforms List</i> at <a href="http://www.cisco.com/en/US/products/ps6509/products_data_sheets_list.html">http://www.cisco.com/en/US/products/ps6509/products_data_sheets_list.html</a> .  Make sure to account for any growth that has occurred since initial system configuration.
<b>Step 4</b>	If you are getting the system time from an NTP server, verify that the first node can synchronize with the NTP server before you install a subsequent node.  To verify the NTP status of the first node, log into the Command Line Interface on the first node and enter the following command:  <b>utils ntp status</b>	For more information, see the <i>Cisco Unified Communications Operating System Administration Guide</i> .   <b>Caution</b> If the first node fails to synchronize with an NTP server, installation of a subsequent node can also fail.
<b>Step 5</b>	If your firewall is not in the routing path, disable the firewall between nodes, if possible. Also, increase the firewall timeout settings until after you complete the installation.	To temporarily allow network traffic in and out of the nodes (for example, setting the firewall rule for these nodes to <code>IP any/any</code> ) does not always suffice. The firewall might still close necessary network sessions between nodes due to timeouts.
<b>Step 6</b>	Do not run Network Address Translation (NAT) or Port Address Translation (PAT) between Cisco Unity Connection nodes.	
<b>Step 7</b>	Record the network interface card (NIC) speed and duplex settings of the switch port to which you will connect the new server.  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.	If you are using Network Fault Tolerance, the Network Fault Tolerance configuration gets lost during the replacement. You will need to configure it on each server after the upgrade.  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].
<b>Step 8</b>	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 “ <a href="#">Verifying DNS Registration</a> ” section on page 2-12.
<b>Step 9</b>	Record the configurations settings for each server that you plan to install.	To record your configuration settings, see <a href="#">Table 2-8</a> .
<b>Step 10</b>	Configure any subsequent nodes on the first node before you install a subsequent node.	From Cisco Unified Communications Manager Administration on the first node, choose <b>System &gt; Server</b> and configure the IP address for the subsequent nodes. For more information, see the <i>Cisco Unified Communications Manager Administration Guide</i> .

# Important Considerations

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 node 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.
- When installing a Connection cluster, install the Cisco Unity Connection software on the first node (the publisher server) first and then on the subsequent node (the subscriber server).
- When installing a Connection cluster, make sure that the subscriber server can connect to the publisher server during the installation.
- When you enter the Security password on the first node, be sure that you write it down and save it. You must enter the same password on each subsequent node that you install in the cluster. Install the software during off-peak hours or a maintenance window to avoid impact from interruptions.
- Both servers in a 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.

## Frequently Asked Questions About the 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 postinstallation tasks, takes 45 to 90 minutes, depending on your server type.

### What Usernames and Passwords Do I Need to Specify?

**Note**

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The system checks your passwords for strength. For guidelines on creating a strong passwords, see the [“What Is a Strong Password?”](#) section on page 2-7.

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During the installation, you must specify the following usernames and passwords:

- Administrator Account username and password
- Application User name and password
- Security password

#### **Administrator Account User Name and Password**

You use the Administrator Account username 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 username and password, follow these guidelines:

- Administrator Account username—The Administrator Account username 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 *Cisco Unified Communications Operating System Administration Guide*.

#### **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 Unified Serviceability
- 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 *Cisco Unified Communications Operating System Administration Guide*.

#### **Security Password**

When clustering is configured, Connection 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 Supported Platforms List* at [http://www.cisco.com/en/US/products/ps6509/products\\_data\\_sheets\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_data_sheets_list.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 Systems approved. You cannot install or use unapproved third-party or Windows-based software applications.

## Browser Requirements

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 7.x* at

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/requirements/7xcucsysreqs.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/requirements/7xcucsysreqs.html).

Cisco does not support or test browsers other than those documented here or in *System Requirements*.

# Installing a Memory Upgrade or Replacing Hard Disks (Selected 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 7.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 7.x* at

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/upgrade/guide/7xcucrugx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/upgrade/guide/7xcucrugx.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 Supported Platforms List* at [http://www.cisco.com/en/US/products/ps6509/products\\_data\\_sheets\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_data_sheets_list.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](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, as documented in the *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** If you are replacing hard disks, 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.

---

## Configuring the Hardware

As a part of software installation, the system installer configures the system BIOS and RAID settings for the new operating system and for Cisco Unity Connection. See [Table 2-6](#) for the BIOS settings and [Table 2-7](#) for the RAID settings that are set up during installation.



**Note** If the hardware configuration process fails during installation, you can use boot-time utilities that are found on both the IBM and HP servers to manually configure the RAID and BIOS settings, as shown in [Table 2-6](#) and [Table 2-7](#).

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**Table 2-6 BIOS Configuration Settings for HP and IBM Servers**

HP Servers	IBM Servers
OS Selection: Linux (not applicable on newer models)	OS Selection: Not applicable
Boot order: CD, C:, Floppy	Boot order: CD, C:, Floppy
Post F1 prompt: Delayed	Post F1 prompt: Delayed
Hyperthreading: Enabled	Hyperthreading: Enabled

**Table 2-7 RAID Settings**

MCS 7825 Servers (HP and IBM)	MCS 7835 Servers (HP and IBM)	MCS 7845 Servers (HP and IBM)
Software RAID	Logical drives: 1	Logical drives: 2
Software RAID	RAID type: 1(1+0)	RAID type: 1(1+0)
<b>Note</b> For the HP 7825H1 and the IBM 7825I1, SATA RAID is enabled, and the RAID type specifies 1(1+0), with one logical drive.		

## Verifying DNS Registration

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 Installation

### Revised July 15, 2010

Use [Table 2-8](#) to record the information about your server. Gather this information for a Connection server without 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.

**Table 2-8 Node Configuration Data**


Parameter	Description	Can Entry Be Changed After Installation?
<b>Administrator ID</b> 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.   <b>Caution</b> Do not use any of the following names for the Administrator ID, or the installation will fail: - Operator - Replication - Undeliverablemessagesmailbox - UnityConnection	No, you cannot change the entry after installation.  <b>Note</b> After installation, you can create additional administrator accounts, but you cannot change the original administrator account user ID.
<b>Administrator Password</b> 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: <b>CLI &gt; set password admin</b>

Table 2-8 Node Configuration Data (continued)


Parameter	Description	Can Entry Be Changed After Installation?
<b>Application User Name</b> Your entry:	<p>You use the Application User name as the default password for applications that are installed on the system, for example, Cisco Unity Connection Administration and Cisco Unity Connection Serviceability.</p> <p> <b>Caution</b> Do not use any of the following names for the Application User name, or the installation will fail:</p> <ul style="list-style-type: none"> <li>- Operator</li> <li>- Replication</li> <li>- Undeliverablemessagesmailbox</li> <li>- UnityConnection</li> </ul>	<p>Yes, you can change the entry after installation by using the following CLI command:</p> <p>CLI &gt; <b>utils reset_ui_administrator_name</b></p>
<b>Application User Password</b> Your entry:	<p>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.</p>	<p>Yes, you can change the entry after installation by using the following CLI command:</p> <p>CLI &gt; <b>utils reset_ui_administrator_password</b></p>
<b>Country</b> Your entry:	<p>From the list, choose the appropriate country for your installation.</p> <p><b>Note</b> 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 &gt; <b>set web-security</b></p>
<b>DHCP</b> Your entry:	<p>If you want to use DHCP to automatically configure the network settings on your server, choose <b>Yes</b>.</p> <p>If you choose <b>Yes</b>, you do not get prompted for DNS or static configuration settings.</p> <p>If you choose <b>No</b>, you must enter a hostname, IP Address, IP Mask, and Gateway.</p>	<p>Yes, you can change the entry after installation by using the following CLI command:</p> <p>CLI &gt; <b>set network dhcp</b></p>
<b>DNS Enable</b> 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 <b>No</b>.</p> <p>If you have a DNS server, Cisco recommends that you enter <b>Yes</b> to enable DNS.</p> <p><b>Note</b> 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 &gt; <b>set network dns</b></p>



Table 2-8 Node Configuration Data (continued)

Parameter	Description	Can Entry Be Changed After Installation?
<b>DNS Primary</b> Your entry:	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.  Consider this field mandatory if DNS is set to <b>yes</b> (DNS enabled).	Yes, you can change the entry after installation by using the following CLI command:  CLI > <b>set network dns</b>
<b>DNS Secondary (optional)</b> Your entry:	Enter the IP address of the DNS server that you want to specify as the optional secondary DNS server.	Yes, you can change the entry after installation by using the following CLI command:  CLI > <b>set network dns</b>
<b>Domain</b> Your entry:	This field represents the name of the domain in which this machine is located.  Consider this field mandatory if DNS is set to <b>yes</b> .	Yes, you can change the entry after installation by using the following CLI command:  CLI > <b>set network domain</b>
<b>Gateway Address</b> Your entry:	Enter the IP address of the network gateway.  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.  If DHCP is set to <b>No</b> , consider this field mandatory.	Yes, you can change the entry after installation by using the following CLI command:  CLI > <b>set network gateway</b>
<b>Hostname</b> Your entry:	Enter a host name that is unique to your server.  The host name can comprise up to 64 characters and can contain alphanumeric characters and hyphens.  If DHCP is set to <b>No</b> , consider this field mandatory.	Yes, you can change the entry after installation.  For information, see the “ <a href="#">Renaming Cisco Unity Connection 7.x Servers</a> ” chapter of the <i>Reconfiguration and Upgrade Guide for Cisco Unity Connection Release 7.x</i> at <a href="http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/upgrade/guide/7xcucrugx.html">http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/upgrade/guide/7xcucrugx.html</a> .
<b>IP Address</b> Your entry:	Enter the IP address of your server.  If DHCP is set to <b>No</b> , consider this field mandatory.	Yes, you can change the entry after installation.  For information, see the “ <a href="#">Changing the IP Addresses of Cisco Unity Connection 7.x Servers</a> ” chapter of the <i>Reconfiguration and Upgrade Guide for Cisco Unity Connection Release 7.x</i> at <a href="http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/upgrade/guide/7xcucrugx.html">http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/upgrade/guide/7xcucrugx.html</a> .

Table 2-8 Node Configuration Data (continued)

Parameter	Description	Can Entry Be Changed After Installation?
<b>IP Mask</b> Your entry:	Enter the IP subnet mask of this machine. If DHCP is set to <b>No</b> , consider this field mandatory.	Yes, you can change the entry after installation by using the following CLI command: <b>CLI &gt; set network ip eth0</b>
<b>Location</b> Your entry:	Choose the appropriate location for the server. <b>Note</b> The value you enter gets used to generate a Certificate Signing Request (CSR).	Yes, you can change the entry after installation by using the following CLI command: <b>CLI &gt; set web-security</b>
<b>MTU Size</b> 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. If you are unsure of the MTU setting for your network, use the default value. Default: 1500 bytes The MTU setting must be the same on all nodes in a cluster.	Yes, you can change the entry after installation by using the following CLI command: <b>CLI &gt; set network mtu</b>
<b>NIC Duplex</b> Your entry:	Choose the duplex mode for the network interface card (NIC), either Full or Half. <b>Note</b> 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: <b>CLI &gt; set network nic</b>
<b>NIC Speed</b> Your entry:	Choose the speed for the NIC, either 10 megabits per second or 100 megabits per second. <b>Note</b> 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: <b>CLI &gt; set network nic</b>
<b>NTP Server</b> Your entry:	Enter the hostname or IP address of one or more network time protocol (NTP) servers with which you want to synchronize. <b>Note</b> You can enter up to five NTP servers.	Yes, you can change the entry after installation by using the following CLI command: <b>CLI &gt; utils ntp config</b>
<b>Organization</b> Your entry:	Enter the name of your organization. <b>Note</b> The value you enter gets used to generate a Certificate Signing Request (CSR).	Yes, you can change the entry after installation by using the following CLI command: <b>CLI &gt; set web-security</b>

Table 2-8 Node Configuration Data (continued)

Parameter	Description	Can Entry Be Changed After Installation?
<b>Security Password</b> 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><b>Note</b> Save this password. You will be asked to enter the same security password for each subsequent node in the cluster.</p>	<p>Yes, you can change the entry after installation by using the following CLI command:</p> <p>CLI &gt; <b>set password security</b></p> <p> <b>Caution</b> To avoid losing communications between nodes, you must change the Security password on all nodes in a cluster and reboot all of the nodes. For more information, see the description of this command in the <i>Command Line Interface Reference Guide for Cisco Unified Communications Solutions</i>.</p>
<b>SMTP Location</b> Your entry:	<p>Enter the hostname or IP address for the SMTP server that is used for outbound email.</p> <p>The hostname can contain alphanumeric characters, hyphens, or periods, but it must start with an alphanumeric character.</p> <p><b>Note</b> 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 &gt; <b>set smtp</b></p>
<b>State</b> Your entry:	<p>Enter the state where the server is located.</p> <p><b>Note</b> 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 &gt; <b>set web-security</b></p>
<b>Time Zone</b> 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> <b>Caution</b> 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 &gt; <b>set timezone</b></p>
<b>Unit</b> Your entry:	<p>Enter your unit.</p> <p><b>Note</b> 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 &gt; <b>set password admin</b></p>

# 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](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 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.
- **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 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. This document divides the procedure for using this installation program into the following major topics:

- [Navigating Within the Installation Wizard, page 2-19](#)
- [Starting the Installation, page 2-19](#)
- [Entering Preexisting Configuration Information, page 2-21](#)
- [Applying a Patch, page 2-22](#)
- [Performing the Basic Installation, page 2-25](#)
- [Configuring the First Node, page 2-26](#)
- [Configuring a Subsequent Node, page 2-27](#)

## Navigating Within the Installation Wizard

For instructions on how to navigate within the installation wizard, see [Table 2-9](#).

**Table 2-9** *Installation Wizard Navigation*

To Do This	Press This
Move to the next field	<b>Tab</b>
Move to the previous field	<b>Alt-Tab</b>
Choose an option	Space bar or <b>Enter</b>
Scroll up or down in a list	Up or down arrow
Go to the previous window	Space bar or <b>Enter</b> to choose <b>Back</b> (when available)
Get help information on a window	Space bar or <b>Enter</b> to choose <b>Help</b> (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 install from a DVD, unless you want to reimage the server with a later product release. You can go directly to the [“Entering Preexisting Configuration Information” procedure on page 2-21](#).

### 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:
- If the Media Check Result displays Pass, choose **OK** to continue the installation.
  - 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.

---

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)




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**Note** Only the products that are supported on your server appear in the list.

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**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 7.x specifications. See the applicable table for your server model in the “Cisco Unity Connection Supported Servers” section of the *Cisco Unity Connection Supported Platforms List* at [http://www.cisco.com/en/US/products/ps6509/products\\_data\\_sheets\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_data_sheets_list.html). (If a memory upgrade is required, see the “Installing a Memory Upgrade or Replacing Hard Disks (Selected Servers Only)” section on page 2-9 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 2-21](#).
- 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 2-21](#). 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 2-21](#). 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 2-22](#).
- 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 2-25](#).

## 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 popup 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 2-22](#).
- 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 2-25](#).

---

## 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

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**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 2-23](#).
  - **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 2-23](#).
  - **LOCAL**—Retrieves the upgrade file from a local DVD. Continue with the [“Upgrading from a Local Disk” section on page 2-22](#).
- 

## 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 “Performing the Basic Installation” section on page 25.
- 


## 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.

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

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- 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 node and gateway or to use Dynamic Host Configuration Protocol (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 node, 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 2-8](#) 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 2-8](#) 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 2-25.

---

## Performing the Basic Installation

Revised July 15, 2010

### Procedure

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**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 node or to use Dynamic Host Configuration Protocol (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 node, 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 2-8](#) 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 2-8](#) 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 2-8](#).




---

**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 node in a Connection cluster (the publisher server), as the subsequent node (the subscriber server), or as a server without a Connection cluster.

- To configure this server as the first node in a Connection cluster or as a server without a Connection cluster, choose **Yes** and continue with the [“Configuring the First Node”](#) section on page 2-26.
  - To configure this server as a subsequent node in the cluster, choose **No** and continue with the [“Configuring a Subsequent Node”](#) section on page 2-27.
- 

## Configuring the First Node

After you finish the basic installation, follow this procedure to configure the server as the first node in a Connection cluster (publisher server) 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 first node. Ensure the external NTP server is stratum 9 or higher (meaning stratum 1-9). Subsequent nodes in the cluster will get their time from the first node.

**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 2-8](#).



**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 nodes, and you must ensure this password is identical on all nodes in the cluster.

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 2-8](#) 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 postinstallation tasks that are listed in the [“Postinstallation Tasks”](#) section on page 2-29.

## Configuring a Subsequent Node

To configure a subsequent node in the cluster, follow these steps.



### Caution

You must configure the subsequent node (subscriber server) on the first node (publisher server) by using CUC Administration before you install the subsequent node (subscriber server). See the [“Configuring a Cisco Unity Connection Cluster”](#) chapter of the *Cluster Configuration and Administration Guide for Cisco Unity Connection Release 7.x*.

**Procedure**

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



**Note** If the first node is not synchronized with an NTP server, installation of the subsequent node will fail.

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

The Network Connectivity Test Configuration window displays.

- Step 3** During installation of a subsequent node, the system checks to ensure that the subsequent node can connect to the first node.

- 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 first node connectivity information 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 postinstallation tasks that are listed in the [“Postinstallation Tasks”](#) section on page 2-29.

## Postinstallation Tasks

After installing Cisco Unity Connection on your server, you must perform some postinstallation tasks before you can begin using it. For a list of tasks, see [Table 2-10](#).



### 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 2-10** Postinstallation Tasks

Postinstallation Tasks	Important Notes
Log in as the Cisco Unity Connection Application User and change the Application User passwords.	See the “ <a href="#">Changing the Default Application User Passwords</a> ” section on page 2-29.
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, see the <i>Cisco Unified Serviceability Administration Guide</i> .	See the <i>Cisco Unified Serviceability Administration Guide</i> .
Configure the backup settings.  Remember to back up your Cisco Unity Connection data daily.	See the <i>Disaster Recovery System Administration Guide</i> .
If applicable, configure any network management systems in use at your site.	See 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 the *System Administration Guide for Cisco Unity Connection* 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 *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 Real-Time Monitoring Tool. For more information on using and installing the Real-Time Monitoring Tool, see the *Cisco Unified Serviceability Administration Guide*.



## CHAPTER 3

# Installing Additional Languages on the Cisco Unity Connection 7.x Server

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This chapter contains the following sections:

- [Confirming that Connection Is Licensed for English-United States, page 3-1](#)
- [Downloading Connection 7.x Language Files, page 3-2](#)
- [Installing Connection 7.x Language Files, page 3-3](#)

## Confirming that Connection Is Licensed for English-United States

### Added May 2009

If you want to use English-United States for the Cisco Unity Connection conversation or you want users to be able to create personal call transfer rules, the Connection license must include the license tag `LicRegionIsUnrestricted`. If your Connection licenses do not include the `LicRegionIsUnrestricted` tag and you want to use these features, install a license that includes the tag. After you install the license, you must restart Connection. (Licenses without this tag are intended only for use outside the United States.)

If you choose not to install a license that includes the `LicRegionIsUnrestricted` tag, you must install one or more Connection languages.

Connection demonstration licenses include the `LicRegionIsUnrestricted` tag, so you can use English-United States on demonstration systems.

### To Determine Whether the `LicRegionIsUnrestricted` License Tag Is Present

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- Step 1** In Cisco Unity Connection Administration, under **System Settings**, click **Licenses**.
  - Step 2** On the Licenses page, in the list of installed license files, click the name of the first file.
  - Step 3** On the View License page, in the File Content box, search for the text “`LicRegionIsUnrestricted`.”
  - Step 4** If you do not find the text in the first file, search all of the other license files listed on the Licenses page.
  - Step 5** If “`LicRegionIsUnrestricted`” does not appear in any of the license files, get a license that contains the tag before you install English-United States language files.
-

# Downloading Connection 7.x Language Files

Revised May 11, 2010



## Note

This section applies to installing additional languages while installing a new Connection server. To add languages to an existing Connection server, see the “[Adding or Removing Cisco Unity Connection 7.x Languages](#)” chapter of the *Reconfiguration and Upgrade Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/upgrade/guide/7xcucrugx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/upgrade/guide/7xcucrugx.html). The instructions are different.

## To Download Connection 7.x Language Files

- Step 1** On a computer with a high-speed Internet connection, go to the Voice and Unified Communications Downloads page at <http://tools.cisco.com/support/downloads/pub/Redirect.x?mdfid=278875240>.



**Note** To access the software download page, you must be logged on to Cisco.com as a registered user.

- Step 2** In the tree control on the Downloads page, expand **Unified Communications Applications > Voice Mail and Unified Messaging > Cisco Unity Connection**, and click the applicable Connection version.
- Step 3** On the Select a Software Type page, click **Cisco Unity Connection Locale Installer**.
- Step 4** On the Select a Release page, click the applicable Connection version. The download links for languages appear on the right side of the page.
- Step 5** Confirm that the computer you are using has sufficient hard-disk space for the downloaded files. (The download file sizes appear below the download links.)  
The filename for each language is uc-locale-<two-letter language abbreviation>\_<two-letter country abbreviation>-<version>.cop.sgn.
- Step 6** Click the name of a file to download.
- Step 7** On the Download Image page, make note of the MD5 value.
- Step 8** Follow the on-screen prompts to complete the download.
- Step 9** Repeat [Step 6](#) through [Step 8](#) for each Connection language that you want to install.
- Step 10** For each downloaded file, use a checksum generator to confirm that the MD5 checksum matches the checksum that is listed on Cisco.com. If the values do not match, the downloaded file is damaged.



## Caution

Do not attempt to use a damaged file to install software or the results will be unpredictable. If the MD5 values do not match, download the file again until the value for the downloaded file matches the value listed on Cisco.com.

Free checksum tools are available on the Internet—for example, the Microsoft File Checksum Integrity Verifier utility. The utility is described in Microsoft Knowledge Base article 841290, *Availability and Description of the File Checksum Integrity Verifier Utility*. The KB article also includes a link for downloading the utility.

- Step 11** Either copy the downloaded files to an FTP or SFTP server, or burn the files to CDs or DVDs. If you burn discs of the files, note the following considerations:
- Use the Joliet file system, which accommodates filenames up to 64 characters long.

- If the disc-burning application that you are using includes an option to verify the contents of the burned disc, choose that option. This causes the application to compare the contents of the burned disc with the source files.
- Label the discs “Cisco Unity Connection <version> Languages.”

**Step 12** Delete the downloaded files to free disk space.

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## Installing Connection 7.x Language Files

Revised May 11, 2010



**Note**

This section applies to installing additional languages while installing a new Connection server. To add languages to an existing Connection server, see the “[Adding or Removing Cisco Unity Connection 7.x Languages](#)” chapter of the *Reconfiguration and Upgrade Guide for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/upgrade/guide/7xcucrugx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/upgrade/guide/7xcucrugx.html). The instructions are different.

---

Cisco Unity Connection languages (also known as locales) provide country-specific system prompts, graphical user interfaces, and text-to-speech functionality. You can install language files either by using a CD or DVD in the Connection server, or by accessing the files from a remote source. See the applicable section:

- [Installing Connection 7.x Language Files from a Disc, page 3-3](#)
- [Installing Connection 7.x Language Files from a Network Location or from a Remote Server, page 3-4](#)



**Note**

Languages are not licensed, and Connection 7.x does not enforce a limit on the number of languages you can install and use. However, the more languages you install, the less hard-disk space is available for storing voice messages. In the *Cisco Unity Connection 7.(x) Supported Platforms List* ([http://www.cisco.com/en/US/products/ps6509/products\\_data\\_sheets\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_data_sheets_list.html)), information on the number of minutes of storage available on each server assumes that you have installed no more than five languages.

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## Installing Connection 7.x Language Files from a Disc

Revised May 11, 2010

### To Install Connection 7.x Language Files from a Disc

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- Step 1** Stop the Connection Conversation Manager and Connection Mixer services:
- a. Start Cisco Unity Connection Serviceability.
  - b. From the Tools menu, click **Service Management**.
  - c. Under Critical Services, in the Connection Conversation Manager row, click **Stop**.
  - d. Wait for the service to stop.

- e. Also under Critical Services, in the Connection Mixer row, click **Stop**.
  - f. Wait for the service to stop.
- Step 2** Insert the Languages disc in the disc drive.
- Step 3** Log into Cisco Unified Operating System Administration.
- Step 4** From the Software Upgrades menu, click **Install/Upgrade**.  
The Software Installation/Upgrade window displays.
- Step 5** In the Source list, click **DVD/CD**.
- Step 6** In the Directory field, enter the path to the folder that contains the language file on the CD or DVD.  
If the language file is in the root folder, or if you created an ISO image DVD, enter a slash (/) in the Directory field.
- Step 7** To continue the language installation process, click **Next**.
- Step 8** Choose the language that you want to install, and click **Next**.
- Step 9** Monitor the progress of the download.
- Step 10** *If you want to install another language:* Click **Install Another**, and repeat [Step 4](#) through [Step 9](#).  
*If you are finished installing languages:* Restart services:
- a. Start Cisco Unity Connection Serviceability.
  - b. From the Tools menu, click **Service Management**.
  - c. Under Critical Services, in the Connection Conversation Manager row, click **Start**.
  - d. Wait for the service to start.
  - e. Also under Critical Services, in the Connection Mixer row, click **Start**.
  - f. Wait for the service to start.
  - g. *If you installed Japanese:* Run the CLI command **utils service restart Cisco Tomcat** to restart the Tomcat service.
- 

## Installing Connection 7.x Language Files from a Network Location or from a Remote Server

**Revised May 11, 2010**

During this procedure, do not use the web browser controls (for example, Refresh/Reload) while accessing Cisco Unified Operating System Administration. Instead, use the navigation controls provided in the administration interface.

### To Install Connection 7.x Language Files from a Network Location or from a Remote Server

---

- Step 1** Stop the Connection Conversation Manager and Connection Mixer services:
- a. Start Cisco Unity Connection Serviceability.
  - b. From the Tools menu, click **Service Management**.
  - c. Under Critical Services, in the Connection Conversation Manager row, click **Stop**.
  - d. Wait for the service to stop.

- e. Also under Critical Services, in the Connection Mixer row, click **Stop**.
- f. Wait for the service to stop.

**Step 2** Log into Cisco Unified Operating System Administration.

**Step 3** From the Software Upgrades menu, click **Install/Upgrade**. The Software Installation/Upgrade window displays.

**Step 4** In the Source list, click **Remote Filesystem**.

**Step 5** In the **Directory** field, enter the path to the folder that contains the language file on the remote system. If the language file is located on a Linux or Unix server, you must enter a forward slash at the beginning of the folder path. (For example, if the language file is in the languages folder, you must enter **/languages**.)

If the language file is located on a Windows server, remember that you are connecting to an FTP or SFTP server, so use the appropriate syntax:

- Begin the path with a forward slash (/) and use forward slashes throughout the path.
- The path must start from the FTP or SFTP root folder on the server, so you cannot enter a Windows absolute path, which starts with a drive letter (for example, C:).

**Step 6** In the **Server** field, enter the server name or IP address.

**Step 7** In the **Username** field, enter your username on the remote server.

**Step 8** In the **User Password** field, enter your password on the remote server.

**Step 9** In the **Transfer Protocol** list, click the applicable option.

**Step 10** Click **Next**.

**Step 11** Choose the language that you want to install, and click **Next**.

**Step 12** Monitor the progress of the download.

If you lose your connection with the server or close your browser during the installation process, you may see the following message when you try to access the Software Upgrades menu again:

Warning: Another session is installing software, click Assume Control to take over the installation.

If you are sure you want to take over the session, click **Assume Control**.

If Assume Control does not display, you can also monitor the language installation with the Real-Time Monitoring Tool.

**Step 13** *If you want to install another language:* Click **Install Another**, and repeat [Step 3](#) through [Step 12](#).

*If you finished installing languages:* Restart services:

- a. Start Cisco Unity Connection Serviceability.
- b. From the Tools menu, click **Service Management**.
- c. Under Critical Services, in the Connection Conversation Manager row, click **Start**.
- d. Wait for the service to start.
- e. Also under Critical Services, in the Connection Mixer row, click **Start**.
- f. Wait for the service to start.
- g. *If you installed Japanese:* Run the CLI command **utils service restart Cisco Tomcat** to restart the Tomcat service.

