



CHAPTER 31

Cisco Unity Messaging Integration

Cisco Unity comprises a communications solution that delivers voice messaging and unified messaging in a unified environment.

Unified messaging means that users can manage all message types from the same inbox. Cisco Unity works in concert with an Exchange server or (for Cisco Unity 4.0 and later) a Domino server to collect and store all messages—both voice and e-mail—in one message facility. Users can then access voice and e-mail messages on a computer, through a touchtone phone, or over the Internet.

For complete, step-by-step instructions on how to integrate Cisco Unified Communications Manager with the Cisco Unity messaging system, see the applicable Cisco Unified Communications Manager Integration Guide for Cisco Unity; for example, *Cisco Unified Communications Manager SCCP Integration Guide for Cisco Unity* or *Cisco Unified Communications Manager SIP Trunk Integration Guide for Cisco Unity*.



Note

For information on how to integrate Cisco Unified Communications Manager with the Cisco Unity Connection messaging system, see the applicable *Cisco Unified Communications Manager SCCP Integration Guide for Cisco Unity Connection* or *Cisco Unified Communications Manager SIP Trunk Integration Guide for Cisco Unity Connection*.

This section covers the following topics:

- [Cisco Unity and Cisco Unity Connection Configuration Checklist, page 31-1](#)
- [System Requirements, page 31-4](#)
- [Integration Description, page 31-4](#)
- [Securing the Voice-Mail Port, page 31-6](#)
- [Where to Find More Information, page 31-6](#)

Cisco Unity and Cisco Unity Connection Configuration Checklist

Cisco Unity comprises a communications solution that delivers voice messaging and unified messaging in a unified environment.

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**Note**

For information on how to integrate Cisco Unified Communications Manager with the Cisco Unity Connection messaging system, see the applicable *Cisco Unified Communications Manager SCCP Integration Guide for Cisco Unity Connection* or *Cisco Unified Communications Manager SIP Trunk Integration Guide for Cisco Unity Connection*.

Table 31-1 provides steps to configure the Cisco Unity or Cisco Unity Connection voice-messaging systems. For more information, see the “Where to Find More Information” section on page 31-6.

Table 31-1 Cisco Unity and Cisco Unity Connection Configuration Checklist

Configuration Steps		Procedures and Related Topics
Step 1	Ensure that you have met the system requirements for Cisco Unified Communications Manager, and Cisco Unity or Cisco Unity Connection.	System Requirements, page 31-4 Applicable integration guide for Cisco Unity or Cisco Unity Connection
Step 2	Add voice-mail ports (directory numbers) for each port that you are connecting to Cisco Unity or Cisco Unity Connection.	Cisco Voice-Mail Port Configuration, Cisco Unified Communications Manager Administration Guide Applicable integration guide for Cisco Unity or Cisco Unity Connection
Step 3	Add a voice-mail pilot number for the voice-mail ports.	Cisco Voice-Mail Pilot Configuration, Cisco Unified Communications Manager Administration Guide Applicable integration guide for Cisco Unity or Cisco Unity Connection
Step 4	Specify MWI and voice-mail extensions.	Service Parameter Configuration, Cisco Unified Communications Manager Administration Guide Message Waiting Configuration, Cisco Unified Communications Manager Administration Guide Applicable integration guide for Cisco Unity or Cisco Unity Connection
Step 5	Add the Voice Mail Port DNs to a line group.	Line Group Configuration Settings, Cisco Unified Communications Manager Administration Guide
Step 6	Add the line group that contains the Voice Mail Port DNs to a hunt list.	Route List Configuration Settings, Cisco Unified Communications Manager Administration Guide

Table 31-1 Cisco Unity and Cisco Unity Connection Configuration Checklist (continued)

Configuration Steps		Procedures and Related Topics
Step 7	Associate the hunt list that contains the line group with a hunt pilot. Note The hunt pilot must match the voice-mail pilot that is configured and used by the voice-mail profiles.	Route Pattern Configuration Settings , <i>Cisco Unified Communications Manager Administration Guide</i>
Step 8	Set up the voice-mail pilot number.	Cisco Voice-Mail Pilot Configuration , <i>Cisco Unified Communications Manager Administration Guide</i>
Step 9	Set up the voice-mail profile.	Voice-Mail Profile Configuration , <i>Cisco Unified Communications Manager Administration Guide</i> Applicable integration guide for Cisco Unity or Cisco Unity Connection
Step 10	Set up the voice-mail service parameters.	Service Parameter Configuration , <i>Cisco Unified Communications Manager Administration Guide</i> . Applicable integration guide for Cisco Unity or Cisco Unity Connection
Step 11	Set up Cisco Unified Communications Manager authentication and encryption. For Cisco Unity, this applies to releases 4.0(5) and later.	Applicable integration guide for Cisco Unity or Cisco Unity Connection <i>Cisco Unified Communications Manager Security Guide</i>
Step 12	Test the integration.	Applicable integration guide for Cisco Unity or Cisco Unity Connection <i>Cisco Unity Troubleshooting Guide</i> See the installation guide for the phone system.
Step 13	Integrate the secondary server for Cisco Unity failover (use when Cisco Unity failover is installed). This step does not apply to Cisco Unity Connection.	Applicable integration guide for Cisco Unity <i>Cisco Unity Failover Guide</i>
Step 14	Choose the auto-generated Cisco Unity or Cisco Unity Connection server in the Application Server Configuration window in Cisco Unified Communications Manager Administration.	Application Server Configuration , <i>Cisco Unified Communications Manager Administration Guide</i>
Step 15	If you are using Cisco Unified Communications Manager Administration to configure voice-messaging users, create a Cisco Unity Connection voice mailbox. Tip You must configure both Cisco Unity Connection and Cisco Unified Communications Manager Administration to create voice mailboxes. Tip If you want to do so, you can use the import users functionality in Cisco Unity Connection to create users.	<i>User Moves, Adds, and Changes Guide for Cisco Unity Connection</i> Directory Number Configuration , <i>Cisco Unified Communications Manager Administration Guide</i> End User Configuration , <i>Cisco Unified Communications Manager Administration Guide</i>

System Requirements

The following lists provide requirements for your phone system and the Cisco Unity server. For specific version information, see the applicable *Cisco Unified Communications Manager Integration Guide for Cisco Unity*.

Phone System

- A Cisco Unified Communications applications server that consists of Cisco Unified Communications Manager software that is running on a Cisco Media Convergence Server (MCS) or customer-provided server that meets approved Cisco configuration standards
- Cisco licenses for all phone lines, IP phones, and other H.323-compliant devices or software (such as Cisco Virtual Phone and Microsoft NetMeeting clients) that will be connected to the network, as well as one license for each Cisco Unity port
- IP phones for the Cisco Unified Communications Manager extensions
- A LAN connection in each location where you will plug an IP phone into the network
- For multiple Cisco Unified Communications Manager clusters, capability for subscribers to dial an extension on another Cisco Unified Communications Manager cluster without having to dial a trunk access code or prefix.

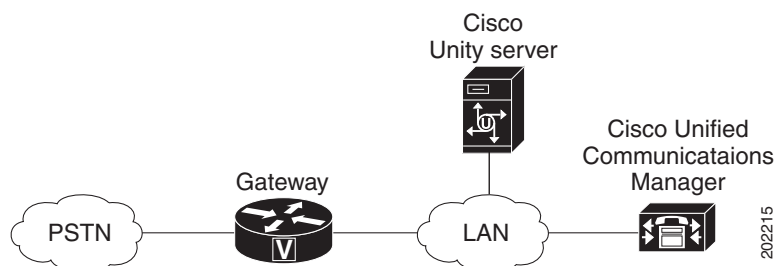
Cisco Unity Server

- Cisco Unity system that was installed and made ready for the integration as described in the *Cisco Unity Installation Guide*.
- For SCCP integrations (not SIP trunk)—The applicable Cisco Unity-Unified CM TSP installed. For more information on compatible versions of the TSP, see the *SCCP Compatibility Matrix: Cisco Unity, Cisco Unity-CM TSP, Cisco Unified CM, and Cisco Unified CM Express*.
- A license that enables the appropriate number of voice-messaging ports.

Integration Description

The integration uses the LAN to connect Cisco Unity and Cisco Unified Communications Manager. The gateway provides connections to the PSTN. [Figure 31-1](#) shows the connections.

Figure 31-1 Connections Between the Phone System and Cisco Unity



**Note**

The following example applies only if the caller goes through the Cisco Unity Auto-Attendant. Most other calls get routed directly to the correct voice mailbox. For example, callers who call a subscriber and get forwarded to voice-messaging system go directly to the voice mailbox and can record a voice message. Subscribers who call in to check their voice messages from their own phones go directly to their voice mailbox and can listen to voice messages.

1. When an external call arrives, the Cisco gateway sends the call over the LAN to the machine on which Cisco Unified Communications Manager is installed.
2. For Cisco Unified Communications Manager lines that are configured to route calls to Cisco Unity, Cisco Unified Communications Manager routes the call to an available Cisco Unity extension.
3. Cisco Unity answers the call and plays the opening greeting.
4. During the opening greeting, the caller enters either the name of a subscriber or an extension; for example, 1234.
5. Cisco Unity notifies Cisco Unified Communications Manager that it has a call for extension 1234.
6. At this point, the path of the call depends on whether Cisco Unity is set up to perform supervised transfers or release transfers. See the applicable *Cisco Unified Communications Manager Integration Guide for Cisco Unity* for more information.

Cisco Unified Communications Manager SIP Trunk Integration

Cisco Unity Connection 1.1 and later support a SIP trunk integration with the Cisco Unified Communications Manager phone system when the Cisco Unified Communications Manager phone system has only phones that are running SIP. See the applicable *Cisco Unified Communications Manager SIP Trunk Integration Guide for Cisco Unity Connection* for more detailed information. Cisco Unity 4.2 and later also support SIP trunk integrations. See the applicable *Cisco Unified Communications Manager SIP Trunk Integration Guide for Cisco Unity* for more information. The following list describes a few tips that should be performed from the Cisco Unified Communications Manager Administration side when you are integrating the Cisco Unified Communications Manager phone system with Cisco Unity Connection or Cisco Unity by a SIP trunk:

- Create a SIP trunk that points to Cisco Unity and ensure that “Redirecting Number IE Delivery - Outbound” is checked. This instructs Cisco Unified Communications Manager to send the Diversion Header to Cisco Unity, so you access the correct voice mailbox. See “[Trunk Configuration](#)” in the *Cisco Unified Communications Manager Administration Guide*.
- Cisco Unified Communications Manager SIP trunk integration applies to MWI. When you configure the SIP trunk security profile for the SIP voice-messaging trunk, check “Accept Unsolicited Notification.” This ensures that MWI will operate properly. You must enable “Accept Replaces Header” if you want to support transfers. This allows “REFER w/replaces” to be passed, which is used for Cisco Unity-initiated, supervised transfers.
- Assure that your phones support DTMF Relay per RFC-2833. Cisco Unity will support both OOB and RFC-2833.
- Define a route pattern (for example, 7555) and point that route pattern to the SIP trunk to Cisco Unity. See “[Route Pattern Configuration](#)” in the *Cisco Unified Communications Manager Administration Guide*.
- Define a voice mail pilot (for example, 7555). See “[Cisco Voice-Mail Pilot Configuration](#)” in the *Cisco Unified Communications Manager Administration Guide*.

- Define a voice mail profile (for example, VM Profile 1) with the voice mail pilot that you defined in the previous step. See “[Voice-Mail Profile Configuration](#)” in the *Cisco Unified Communications Manager Administration Guide*.

**Note**

Make the voice mail profile that you defined in the preceding step the system default.

Securing the Voice-Mail Port

When you configure security for Cisco Unified Communications Manager voice mail ports and Cisco Unity SCCP devices, a TLS connection (handshake) opens for authenticated devices after each device accepts the certificate of the other device; likewise, the system sends SRTP streams between devices; that is, if you configure the devices for encryption.

When the device security mode equals authenticated or encrypted, the Cisco Unity-Unified CM TSP connects to Cisco Unified Communications Manager through the Cisco Unified Communications Manager TLS port. When the security mode equals non-secure, the Cisco Unity TSP connects to Cisco Unified Communications Manager through the Cisco Unified Communications Manager port. Cisco Unity Connection connects to Cisco Unified Communications Manager through the Cisco Unified Communications Manager TLS port.

For interactions, restrictions, and procedures on how to configure security, see the *Cisco Unified Communications Manager Security Guide*.

Where to Find More Information

Additional Cisco Documentation

- [Cisco Unity and Cisco Unity Connection Configuration Checklist](#), page 31-1
- [System Requirements](#), page 31-4
- [Integration Description](#), page 31-4
- [Securing the Voice-Mail Port](#), page 31-6
- [Cisco Voice-Mail Port Configuration](#), *Cisco Unified Communications Manager Administration Guide*
- [Service Parameter Configuration](#), *Cisco Unified Communications Manager Administration Guide*
- [Directory Number Configuration](#), *Cisco Unified Communications Manager Administration Guide*
- [End User Configuration](#), *Cisco Unified Communications Manager Administration Guide*
- *Cisco Unified Communications Manager SCCP Integration Guide for Cisco Unity*
- *Cisco Unified Communications Manager SIP Trunk Integration Guide for Cisco Unity*
- *Cisco Unified Communications Manager SIP Trunk Integration Guide for Cisco Unity Connection*
- *Cisco Unified Communications Manager SCCP Integration Guide for Cisco Unity Connection*
- *Cisco Unity Installation Guide*
- *Cisco Unity Troubleshooting Guide*
- *Cisco Unity Connection Installation Guide*
- *Cisco Unity Connection Troubleshooting Guide*