



Configuring Voice Messaging Ports for Security

This chapter contains information on the following topics:

- [Voice Messaging Security Overview, page 10-1](#)
- [Configuration Tips for Voice Messaging Security, page 10-1](#)
- [Secure Voice Messaging Port Configuration Checklist, page 10-2](#)
- [Applying a Security Profile to a Single Voice Messaging Port, page 10-3](#)
- [Applying the Security Profile in the Voice Mail Port Wizard, page 10-4](#)
- [Where to Find More Information, page 10-4](#)

Voice Messaging Security Overview

To configure security for Cisco Unified CallManager voice messaging ports and Cisco Unity SCCP devices, you choose a secure device security mode for the port. If you choose an authenticated voice mail port, a TLS connection opens, which authenticates the devices by using a mutual certificate exchange (each device accepts the certificate of the other device). If you choose encrypted voice mail port, the system first authenticates the devices and then sends encrypted voice streams between the devices.

When the device security mode equals authenticated or encrypted, the Cisco Unity-CM TSP connects to Cisco Unified CallManager through the Cisco Unified CallManager TLS port. When the device security mode equals nonsecure, the Cisco Unity TSP connects to Cisco Unified CallManager through the Cisco Unified CallManager SCCP port.



In this document, the use of the term, server, refers to a server in the Cisco Unified CallManager cluster. The use of the phrase, voice-mail server, refers to a Cisco Unity server.

Configuration Tips for Voice Messaging Security

Consider the following information before you configure security:

- You must run Cisco Unity 4.0(5) or later with this version of Cisco Unified CallManager.
- You must perform security tasks for Cisco Unity by using the Cisco Unity Telephony Integration Manager; for information on how to perform these tasks, refer to the *Cisco Unified CallManager 5.0 Integration Guide for Cisco Unity 4.x*.

Secure Voice Messaging Port Configuration Checklist

- In addition to the procedures that are described in this chapter, you must use the certificate management feature in Cisco Unified Communications Operating System Administration to save the Cisco Unity certificate to the trusted store. For more information on this task, refer to the *Cisco Unified Communications Operating System Administration Guide*. After you copy the certificate, you must restart the Cisco CallManager service on each server in the cluster.
- If Cisco Unity certificates expire or change for any reason, use the certificate management feature in the Cisco Unified Communications Operating System Administration to update the certificates in the trusted store. The TLS authentication fails when certificates do not match, and voice messaging does not work because it cannot register to Cisco Unified CallManager.
- When configuring voice-mail server ports, you must select a device security mode.
- The setting that you specify in the Cisco Unity Telephony Integration Manager must match the voice messaging port device security mode that is configured in Cisco Unified CallManager Administration. In Cisco Unified CallManager Administration, you apply the device security mode to the voice messaging port in the Voice Mail Port Configuration window (or in the Voice Mail Port Wizard).

**Tip**

If the device security mode settings do not match for Cisco Unified CallManager and Cisco Unity, the Cisco Unity ports fail to register with Cisco Unified CallManager, and Cisco Unity cannot accept calls on those ports.

- Changing the security profile for the port requires a reset of Cisco Unified CallManager devices and a restart of the Cisco Unity software. If you apply a security profile in Cisco Unified CallManager Administration that uses a different device security mode than the previous profile, you must change the setting in Cisco Unity.
- You cannot change the Device Security Mode for existing voice-mail servers through the Voice Mail Port Wizard. If you add ports to an existing voice-mail server, the device security mode that is currently configured for the profile automatically applies to the new ports.

Secure Voice Messaging Port Configuration Checklist

Use [Table 10-1](#) as a reference when you configure security for voice-messaging ports.

Table 10-1 Configuration Checklist for Securing Voice Messaging Ports

Configuration Steps	Related Procedures and Topics
Step 1 Verify that you installed and configured the Cisco CTL Client for Mixed Mode.	Configuring the Cisco CTL Client, page 3-1
Step 2 Verify that you configured the phones for authentication or encryption.	Phone Security Overview, page 4-1 Configuring a Phone Security Profile, page 5-1

Table 10-1 Configuration Checklist for Securing Voice Messaging Ports (continued)

Configuration Steps	Related Procedures and Topics	
Step 3	Use the certificate management feature in the Cisco Unified Communications Operating System Administration to copy the Cisco Unity certificate to the trusted store on each server in the cluster; then, restart the Cisco CallManager service on each server.	<ul style="list-style-type: none"> • Configuration Tips for Voice Messaging Security, page 10-1 • <i>Cisco Unified Communications Operating System Administration Guide</i> • <i>Cisco Unified CallManager Serviceability Administration Guide</i>
Step 4	In Cisco Unified CallManager Administration, configure the device security mode for the voice messaging ports.	<ul style="list-style-type: none"> • Applying a Security Profile to a Single Voice Messaging Port, page 10-3 • Applying the Security Profile in the Voice Mail Port Wizard, page 10-4
Step 5	Perform security-related configuration tasks for Cisco Unity voice messaging ports; for example, configure Cisco Unity to point to the Cisco TFTP server.	<i>Cisco Unified CallManager 5.0 Integration Guide for Cisco Unity 4.x</i>
Step 6	Reset the devices in Cisco Unified CallManager Administration and restart the Cisco Unity software.	<ul style="list-style-type: none"> • <i>Cisco Unified CallManager 5.0 Integration Guide for Cisco Unity 4.x</i> • Applying a Security Profile to a Single Voice Messaging Port, page 10-3

Applying a Security Profile to a Single Voice Messaging Port

To apply a security profile to a single voice messaging port, perform the following procedure.

This procedure assumes that you added the device to the database and installed a certificate in the phone, if a certificate does not already exist. After you apply a security profile for the first time or if you change the security profile, you must reset the device.

Before you apply a security profile, review the following sections:

- [Voice Messaging Security Overview, page 10-1](#)
- [Configuration Tips for Voice Messaging Security, page 10-1](#)
- [Secure Voice Messaging Port Configuration Checklist, page 10-2](#)

Procedure

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- Step 1** Find the voice messaging port, as described in the *Cisco Unified CallManager Administration Guide*.
 - Step 2** After the configuration window for the port displays, locate the **Device Security Mode** setting. From the drop-down list box, choose the security mode that you want to apply to the port. The database predefines these options. The default value specifies Not Selected.
 - Step 3** Click **Save**.
 - Step 4** Click **Reset**.
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Additional Information

See the “Related Topics” section on page 10-4.

Applying the Security Profile in the Voice Mail Port Wizard

To change the security setting for an existing voice-mail server, see the “[Applying a Security Profile to a Single Voice Messaging Port](#)” section on page 10-3.

Before you apply a security profile, review the following sections:

- [Voice Messaging Security Overview](#), page 10-1
- [Configuration Tips for Voice Messaging Security](#), page 10-1
- [Secure Voice Messaging Port Configuration Checklist](#), page 10-2

To apply the Device Security Mode setting in the Voice Mail Port Wizard for a new voice-mail server, perform the following procedure:

Procedure

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- Step 1** In Cisco Unified CallManager Administration, choose **Voice Mail > Voice Mail Port Wizard**.
- Step 2** Enter the name of the voice-mail server; click **Next**.
- Step 3** Choose the number of ports that you want to add; click **Next**.
- Step 4** In the Device Information window, choose a Device Security Mode from the drop-down list box. The database predefines these options. The default value specifies Not Selected.
- Step 5** Configure the other device settings, as described in the *Cisco Unified CallManager Administration Guide*. Click **Next**.
- Step 6** Continue the configuration process, as described in the *Cisco Unified CallManager Administration Guide*. When the Summary window displays, click **Finish**.
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Additional Information

See the “Related Topics” section on page 10-4.

Where to Find More Information

Related Topics

- [System Requirements](#), page 1-4
- [Interactions and Restrictions](#), page 1-5
- [Certificate Types](#), page 1-12
- [Configuration Checklist Overview](#), page 1-20
- [Voice Messaging Security Overview](#), page 10-1
- [Configuration Tips for Voice Messaging Security](#), page 10-1
- [Applying a Security Profile to a Single Voice Messaging Port](#), page 10-3

- Applying the Security Profile in the Voice Mail Port Wizard, page 10-4

Related Cisco Documentation

- *Cisco Unified CallManager 5.0 Integration Guide for Cisco Unity 4.x*
- *Cisco Unified Communications Operating System Administration Guide*

Where to Find More Information