# Licensing for Mixed Voice Messaging/Unified Messaging (Cisco Unity Versions 4.2 and 5.x)

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## Overview

This white paper explains how and when to use the mixed Voice Messaging/Unified Messaging (VM/UM) license for Cisco Unity for Microsoft Exchange and for IBM Lotus Domino. This white paper also discusses issues to consider and provides best practices and recommendations for effectively managing the mixed VM/UM license for Cisco Unity.

This paper contains the following sections:



## Concepts

This document assumes that you understand how to install and operate Cisco Unity correctly and effectively. In addition, you need to understand the following:

- The purpose of a mixed license. See the "Why Use Mixed VM/UM Licenses?" section on page 2.
- How Voice Messaging users can interact with Unified Messaging users. See the "User Types and Interaction" section on page 2.
- Conceptual considerations for the setup and configuration of a mixed VM/UM license. See the "How to Set Up a Cisco Unity Configuration to Support a Mixed VM/UM License: Segmenting Voice Messaging Subscribers" section on page 5.


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- If IBM Lotus Domino is the message store, the use of IBM Lotus Domino Unified Communications (DUC) for Cisco. See the manufacturer documentation.

# Why Use Mixed VM/UM Licenses?

The Cisco Unity Unified Messaging solution offers a variety of configuration options. The core architecture of Cisco Unity centers around enabling Unified Messaging in a converged environment (where voice and data systems are combined). While many organizations use the Unified Messaging capabilities of Cisco Unity, some organizations need a Voice Messaging solution in which Cisco Unity functions as a traditional voice messaging system.

The Unified Messaging and Voice Messaging configurations each require different licenses. An organization can purchase UM licenses or VM licenses for its subscribers, and Cisco Unity enables the organization to manage the licenses and control which features subscribers can use, based on those licenses.

A third option now available is to allow a mixed VM and UM license. This option allows an organization to give the Unified Messaging functionality to some of its subscribers while allowing other subscribers to use Cisco Unity only for Voice Messaging. Enabling this third option gives many organizations ultimate flexibility and allows them to fully adopt Unified Messaging on a schedule that fits their needs.

# User Types and Interaction

The features and functionality available to a Unified Messaging subscriber are somewhat different from the features and functionality available to a Voice Messaging subscriber. This section will explain the differences and also explain how each subscriber type will interact with the other.


- Unified Messaging Subscriber, page 2
- Voice Messaging Subscriber, page 4
- Interaction Between Unified Messaging and Voice Messaging Subscribers, page 4


## Unified Messaging Subscriber

A Unified Messaging subscriber (all Cisco Unity users are called subscribers regardless of the type of user they are) has the following tools with which to manage voice, fax, and e-mail messages, depending on the message store.

**Microsoft Exchange**

- Telephone user interface (TUI). See the "Using the Telephone User Interface" section on page 3.
- Outlook Inbox (using ViewMail for Outlook). See the "Using the Outlook Inbox" section on page 3.
- Cisco Unity Inbox. See the "Using the Cisco Unity Inbox" section on page 3.

**IBM Lotus Domino**

- Telephone user interface (TUI). See the "Using the Telephone User Interface" section on page 3.
- Lotus Notes Inbox (using Lotus Notes with the DUC for Cisco component CS-Client). See the "Using the Lotus Notes Inbox" section on page 3.
- I Notes. See the "Using I Notes" section on page 3.

For information on how to use each of these tools, see the applicable User Guide for Cisco Unity at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_user_guide_list.html.

### Using the Telephone User Interface

Subscribers can access Cisco Unity by phone, and can perform all traditional voice messaging functions, including sending, receiving, replying to, forwarding, saving, and deleting messages. All messages are sent through the e-mail system to the intended recipient(s).

Subscribers can also listen to e-mail messages through the TUI, by using the Text to Speech feature, and can forward or reply to those messages through the TUI.

### Using the Outlook Inbox

Unified Messaging subscribers can access messages of all types—e-mails, voice messages, and faxes—from their Outlook Inbox. How voice messages are managed from the Outlook Inbox depends on whether Outlook is set up to use ViewMail (VMO):

- With ViewMail, subscribers can play and record voice messages from their Outlook Inbox by using the VCR-style controls on the Media Master control bar. They can also use ViewMail to send voice messages to other subscribers, non-Cisco Unity subscribers, and public distribution lists.
- Without ViewMail, subscribers can play voice messages from their Outlook Inbox by using a multimedia player.

### Using the Cisco Unity Inbox

Unified Messaging subscribers can use the Cisco Unity Inbox to listen to, compose, reply to, forward, and delete voice messages. However, if the Unified Messaging subscriber has ViewMail, that tool provides greater functionality and would likely be the preferred tool.

### Using the Lotus Notes Inbox

Unified Messaging subscribers can access messages of all types—e-mails, voice messages, and faxes—from their Lotus Notes client. How voice messages are managed from the Notes client depends on whether Notes is set up to use the CS-Client portion of the DUC for Cisco interface that is required to supply Unified Messaging with Cisco Unity deployed into a Domino environment:

- With DUC for Cisco enabled on the Notes client, subscribers can play and record voice messages from their Lotus Notes client by using the VCR-style controls on the control bar. They can also use the Notes client (enabled with DUC for Cisco) to send voice messages to other subscribers, third-party Cisco Unity subscribers, and public distribution lists.
- Without DUC for Cisco enabled on the Notes client, subscribers can play voice messages from their Notes or I Notes clients by using a multimedia player.

### Using I Notes

Unified Messaging subscribers can use the I Notes interface to listen to, compose, reply to, forward, and delete voice messages. However, if the Unified Messaging subscriber has DUC for Cisco enabled on the Notes client, that tool provides greater functionality and would likely be the preferred tool.

## Voice Messaging Subscriber

The Cisco Unity Voice Messaging subscriber can use the following tools to send, receive, and manage voice messages, depending on the message store. The licensing for Voice Messaging subscriber does not permit a subscriber to use an e-mail client to send and receive voice messages.

**Microsoft Exchange**

- Telephone user interface (TUI). See the "Using the Telephone User Interface" section on page 4.
- Cisco Unity Inbox. See the "Using the Cisco Unity Inbox" section on page 4.

**Note** Cisco Unity Voice Messaging subscriber accounts are separate from their e-mail accounts, so the Outlook Inbox cannot be used for managing voice messages.

**IBM Lotus Domino**

- Telephone user interface (TUI). See the "Using the Telephone User Interface" section on page 4.

**Note** Cisco Unity Voice Messaging subscriber accounts are separate from their e-mail accounts, so the Lotus Notes client cannot be used for managing voice messages.

For information on how to use each of these tools, see the applicable User Guide for Cisco Unity at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_user_guide_list.html.

### Using the Telephone User Interface

The Voice Messaging subscriber uses the TUI to send, receive, and manage voice messages. The Voice Messaging subscriber cannot receive e-mail through the telephone because Text to Speech is not available with a Voice Messaging license.

### Using the Cisco Unity Inbox

A Voice Messaging subscriber can use the Cisco Unity Inbox to listen to, compose, reply to, forward, and delete voice messages. A Voice Messaging subscriber can also receive and manage fax messages through the Cisco Unity Inbox. Because Cisco Unity is not connected to the e-mail environment in the Voice Messaging configuration, e-mails cannot be managed through the Cisco Unity Inbox. The Cisco Unity Inbox is a licensed feature; it is often, but not always, provided for Voice Messaging subscribers.

## Interaction Between Unified Messaging and Voice Messaging Subscribers

There are some issues to consider when implementing a mixed UM/VM license with Cisco Unity:

- Voice Messaging subscriber accounts should be segmented and managed separately from Unified Messaging subscriber accounts, which are combined with e-mail accounts.
- The Voice Messaging subscribers must be restricted to receiving voice messages only through the following tools, depending on the message store:
  - Exchange—The TUI or the Cisco Unity Inbox.
  - Domino—The TUI.
- Voice Messaging subscribers need to be differentiated from Unified Messaging subscribers in the global address list.

- We recommend creating separate distribution lists for Voice Messaging and Unified Messaging subscribers.
- A Unified Messaging subscriber can send a voice message from the tools that are listed above. A Voice Messaging subscriber can send a voice message only from the TUI and (depending on the message store) possibly the Cisco Unity Inbox. If a Unified Messaging subscriber uses an e-mail client to send an e-mail to the unique address of a Voice Messaging subscriber in the global address list, the Voice Messaging subscriber will not be able to access the e-mail message. These interactions can be managed with careful planning.

## How to Set Up a Cisco Unity Configuration to Support a Mixed VM/UM License: Segmenting Voice Messaging Subscribers

To allow for careful management of Voice Messaging subscribers, we recommend doing one of the following:

- Exchange only—Dedicate a storage group on one or more Exchange servers that houses all Voice Messaging subscribers.
- Domino only—Create a separate Domino Domain that houses all Voice Messaging subscribers.
- Either message store—Provide a single server that houses all Voice Messaging subscribers.

While this segmentation is not required, it will make management of those accounts easier. Then, the administrator can establish separate mailbox retention policies, manage quotas and disk space, and manage account particulars such as password resets and display name changes.

If Exchange is the message store, another way to facilitate management of Voice Messaging subscribers is to place them in a separate container or OU in Active Directory. The administrator will then be able to apply a group policy, manage distribution groups, or change multiple accounts at once.

In addition to these methods, the administrator can segment the Voice Messaging subscribers in Cisco Unity by configuring a separate class of service and subscriber template, so that features and functionality can be controlled for existing and new subscribers.

# Planning

As with planning any new installation of Cisco Unity, consider user licenses and homing of subscribers. Regardless of how many of each type of subscriber license you have, determine where these subscribers will be homed (which message store), and how they will be listed and addressed in the directory.

### Licenses

When using a mixed license, we recommend that you track the number of UM licenses and VM licenses against the total number of licenses that you purchased. One way to do this is to segment the subscribers into different classes of service, and to place the user accounts into the following, depending on the message store:

- Exchange—Place the user accounts into different OUs.
- Domino—Place the user accounts into different Domino domains or name address lists.

Another consideration when licensing a mixed UM and VM solution is that all subscribers will reside in the same messaging infrastructure. This means the following, depending on the message store:

- For Exchange, if your Unified Messaging subscribers are already licensed to use Microsoft Exchange, additional Exchange licenses (CALs) to support the mixed UM/VM solution are not necessary. The Voice Messaging subscribers will now have Voice Messaging Exchange mailboxes, and the licenses for these mailboxes are covered under the Cisco Unity software license.
- For Domino, if your Unified Messaging subscribers are already licensed to use Domino, additional licenses (CALs) to support the mixed UM/VM solution are not necessary for the Unified Messaging subscribers, but you must purchase Domino licenses or CALs from Cisco for the Voice Messaging-only subscribers. The Voice Messaging subscribers will now have Voice Messaging Domino mailboxes, and the licenses for these mailboxes are covered under the Cisco Unity software license.

### Naming Convention

The need for a clear naming convention is particularly important in a mixed VM/UM environment, to allow subscribers to be easily identified in your address book as Unified Messaging or Voice Messaging.

For Unified Messaging subscribers, the naming conventions used in the message store have already been established. This same naming convention is used by Cisco Unity when the user is imported into Cisco Unity as a subscriber. The Voice Messaging subscriber, on the other hand, should have a unique identifier in the display name. For example, the following may be used for a Unified Messaging account: DISPLAY NAME John Doe, ALIAS: jdoe. The display name may or may not be different from the alias, but in the mixed VM/UM licensed environment, the display name is what is seen when a user searches for an address when composing a message.

When creating Voice Messaging subscriber accounts, use a different naming convention such as one of the following examples.

**Microsoft Exchange**

Display Name

- VM-John Doe
- John Doe - VM
- John Doe - Voice Messaging

Alias

- Vm-jdoe
- Jdoe-vm
- Jdoe-vmessaging

**IBM Lotus Domino**

Display Name

- VM: John Doe
- John Doe: VM
- John Doe: Voice Messaging

Alias

- VM: jdoe
- Jdoe: vm
- Jdoe: vmessaging

### Account Policies, Public Distribution Lists, and Subscriber Templates

You can set different account policies, and create separate public distribution lists and subscriber templates, to help manage Voice Messaging and Unified Messaging subscribers separately. For information about how to manage subscribers with these tools, see the applicable *System Administration Guide for Cisco Unity* at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_maintenance_guides_list.html.

**Note** We recommend that you not import existing distribution lists when introducing Cisco Unity into the environment as these existing lists may contain accounts that are not Cisco Unity subscribers and could affect how that person receives the message.

We strongly recommend that you not use existing e-mail distribution lists for Voice Messaging subscribers (you can, however, add Unified Messaging subscribers to an e-mail distribution list). Instead, create a Voice Messaging-specific distribution list. For Exchange, create the distribution list by using Cisco Unity Administrator or an Exchange-enabled Active Directory Users and Computers console; for Domino, create the distribution list in Domino.

# Implementation: Segmenting Subscribers

See the applicable section:


- When Microsoft Exchange Is the Message Store, page 7
- When IBM Lotus Domino Is the Message Store, page 7


## When Microsoft Exchange Is the Message Store

To segment subscriber types into separate distribution lists, first determine whether to create the distribution lists through Cisco Unity Administrator or through Active Directory. If you will create the distribution lists in Cisco Unity Administrator, make sure that the directory service account has the appropriate permissions for creating distribution lists. Also, configure the subscriber template to use a Voice Messaging distribution list.

If you will create the distribution list in Active Directory, add the appropriate subscriber types and then import that distribution group as a voice-enabled distribution list in Cisco Unity. Create a specific OU to segment your Voice Messaging subscribers from your Unified Messaging subscribers.

Also consider creating dedicated mailbox stores for Voice Messaging subscribers, or if you have enough subscribers, place them on a dedicated Exchange server.

For more information, see the applicable Cisco Unity installation guide at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_installation_guides_list.html.

## When IBM Lotus Domino Is the Message Store

To segment subscriber types into separate distribution lists, first create the distribution list or lists, add the Cisco Unity subscriber type to the list, and then import them into the Cisco Unity system. Configure the subscriber template to use a Voice Messaging distribution list.

# Upgrades

## Adding Voice Messaging Licenses to a Unified Messaging Configuration

If a Cisco Unity customer has an existing Unified Messaging configuration, a UM readiness assessment should have already been performed. Before adding Voice Messaging subscribers, you must conduct additional capacity planning.

The actual mechanics of adding additional mixed license users to an existing Unified Messaging configuration are exactly the same as for an upgrade to any Cisco Unity system. Simply install the incremental license file onto the server to allow more users to be added to the system. For more information, see the "How to Order" section on page 9.

## Adding Unified Messaging Licenses to a Voice Messaging Configuration

See the applicable section:

- When Microsoft Exchange Is the Message Store, page 8
- When IBM Lotus Domino Is the Message Store, page 9

### When Microsoft Exchange Is the Message Store

Adding Unified Messaging subscribers to a Voice Messaging configuration is a more complex process. In effect, the upgrade is like a Voice Messaging-to-Unified Messaging migration, but with the extra steps of checking for and configuring the naming scheme to avoid clashes between the Exchange Voice Messaging accounts and Exchange e-mail accounts for each Voice Messaging subscriber. Two methods of achieving a Voice Messaging-to-Unified Messaging migration are detailed in the "Installing Cisco Unity Voice Messaging in Anticipation of Migrating to Cisco Unity Unified Messaging" white paper at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_white_papers_list.html.

At a high level, the steps to perform this upgrade are listed in the "Task List: To Upgrade from a Voice Messaging Configuration to a Mixed VM/UM Configuration" section on page 8 (assuming the existing voice messaging server is a single server with an on-box message store, and is an Active Directory domain controller).

**Note** Back up the existing voice messaging server by using the DiRT tool. If you need to restore, you must restore to the same version of Cisco Unity, so ensure that both your Voice Messaging and Unified Messaging configurations are running on the same version of Cisco Unity. (DiRT is available at http://www.ciscounitytools.com/App_DisasterRecoveryTools.htm.) DiRT is used for smaller systems and for Voice Messaging configurations. For more information on backing up and restoring Cisco Unity, see the applicable *Maintenance Guide for Cisco Unity* at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_maintenance_guides_list.html.

#### Task List: To Upgrade from a Voice Messaging Configuration to a Mixed VM/UM Configuration

1. Rename all existing Voice Messaging accounts that will be Voice Messaging accounts on the new mixed system to the agreed naming convention (for example, vm-<username>).

2. Rename all existing Voice Messaging accounts that will be Unified Messaging accounts on the new mixed system so they match the existing e-mail account name on the existing messaging system. This must be an exact match in order for the recovered accounts to be properly mapped during the DiRT restore.
3. Back up the existing voice messaging system again by using DiRT, including the messages, hence capturing the changes made previously.
4. Reinstall the operating system as a member server in the existing Active Directory domain used for the messaging system, following the guidelines for a Unified Messaging installation using an off-box message store. Then install Cisco Unity.
5. Restore the configuration by using DiRT. DiRT will create new users on the Unified Messaging system for the Voice Messaging users, because their names are now unique. However, for the Unified Messaging users, DiRT will merge them to the existing e-mail accounts, because their names now match.
6. Install the incremental license file for the new users, again ensuring that Voice Messaging and Unified Messaging subscribers are allocated according to the licenses purchased.

If possible, however, we recommend that you migrate to a spare server, which provides several advantages. The existing system can be left running for the majority of the upgrade process, lessening downtime, and it can also serve as a near immediate method to back out to a working solution should this prove necessary. If this method is chosen, the above steps can be modified accordingly by simply doing a clean build of the new server rather than a reinstall of the existing one, and by omitting the first backup step, because this new server will be untouched.

### When IBM Lotus Domino Is the Message Store

Adding Unified Messaging subscribers to a Voice Messaging configuration is a more complex process. In effect, the upgrade is like a Voice Messaging-to-Unified Messaging migration, but with the extra steps of checking for and configuring the naming scheme to avoid clashes between the Voice Messaging accounts and e-mail accounts for each Voice Messaging subscriber.

At a high level, the steps to perform this upgrade include installing the Cisco Unity server into the Domino environment and creating your accounts according to their type (UM/VM).

With the move from a Voice Messaging-only installation of Cisco Unity Unified Messaging to a mixed installation of Unified Messaging and Voice Messaging, the message store and directory structure will change and will require reinstallation of the system.

## How to Order

When ordering a mixed licensing system, the same process is used as typically followed when ordering a standard Cisco Unity system, except that both UM and VM subscriber licenses will be included in the order.

To add additional VM or UM licenses to an existing deployment, follow the standard upgrade order process for adding users. For information on ordering Cisco Unity, see http://www.cisco.com/en/US/products/sw/voicesw/ps2237/index.html.