

CHAPTER

## **Cisco Unity Express Features**

## Last Updated: March 10, 2008

This guide describes the set of Cisco Unity Express CLI commands and tasks for configuring, managing, and maintaining Cisco Unity Express applications, such as voice mail.

This guide complements the GUI administration tasks described in the *Cisco Unity Express 3.1 GUI Administrator Guide*.

The focus of this guide is the Cisco Unity Express application. It does not provide information on installation of Cisco routers, Cisco network modules, Cisco Unified Communications Manager Express router., or Cisco Unified Communications Manager server. For more information about those topics, see "Additional References" on page 14.

This chapter contains the following sections:

- Platforms and Cisco IOS Software Images, page 1
- Cisco Unity Express Feature List, page 2

## **Platforms and Cisco IOS Software Images**

Cisco Unity Express applications use a set of commands that are similar in structure to Cisco IOS software commands. However, Cisco Unity Express commands do not affect the Cisco IOS configuration.

See the *Release Notes for Cisco Unity Express 3.1* for detailed information about the Cisco Unity Express hardware and software platforms.



We highly recommend attaching an uninterruptible power supply (UPS) to the router housing the Cisco Unity Express module. Any reliable UPS unit provides continuous power to maintain the operation of the router and the Cisco Unity Express module. Consider the unit's capacity and run time because power consumption differs among Cisco platforms. Ideally, a UPS should include a signaling mechanism that directs the router to shut down Cisco Unity Express properly and then powers off the router.

## **Cisco Unity Express Feature List**

Table 1 lists Cisco Unity Express features by version. Features that are introduced in a particular version are available in that and subsequent versions.

Table 1 Cisco Unity Express Features by Version

Version	Features Introduced in That Version <sup>1</sup>	Feature Description	Feature Information
3.1	Support for Cisco Unified Communications Manager 6.1 and 4.3(1)	Cisco Unity Express 3.1.2 supports interoperability with Cisco Unified Communications Manager 4.3(1). Cisco Unity Express 3.1 provides	See documentation for Cisco Unified Communications Manager 6.1 and 4.3(1).
		interoperability with Cisco Unified Communications Manager 6.1.	
	Support of additional languages	Provides support for several new languages for voice-mail prompts.	See the Release Notes for Cisco Unity Express 3.1 for a list of available languages.
	Support for automatic registration with Cisco Unified Messaging Gateway 1.0	Provides automatic registration and interoperability with Cisco Unified Messaging Gateway 1.0, which provides a tool for system administrators to manage large numbers of Cisco Unity Express endpoints in a distributed network.	See documentation for Cisco Unified Messaging Gateway 1.0.
	Support for storing historical reports on remote sites	In release 3.0, historical reports about call activities and application activities on the system could only be stored locally. Beginning with release 3.1, the historical reports can be stored on remote databases.	See the Cisco Unified Communications Express Historical Reporting Client Configuration Guide.
	New voice mail subscriber feature	Provides voice-mail users with the option of searching a global directory if an extension is not found when addressing a message by name or number. This feature is only available if the voice-mail system is running in an environment managed by the Cisco Unified Messaging Gateway.	See documentation for Cisco Unified Messaging Gateway 1.0.
3.0	Fax	Extends the convergence feature set to include fax support. It allows both inbound and outbound faxes.  Outbound faxes can be printed to the fax machine.	<ul> <li>From the CLI: See         "Configuring         System-Wide Fax         Parameters" on page 82.</li> <li>From the GUI: Use the         System &gt; Fax Settings         option and the online help.</li> </ul>

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	Cascading Message Notification	Extends the existing message notification feature that was introduced in 2.3(1). With this feature, you can:  • Set up a series of cascading notifications to recipients  • Enable subscribers to define time-based rules that determine how the notification is cascaded to other local subscribers.	<ul> <li>From the CLI: See         "Cascading Message         Notification" on page 172.</li> <li>From the GUI: Use the         Voice Mail &gt; Message         Notification option and         the online help.</li> </ul>
	Live Record	Enables Cisco Unity Express subscribers to record live conversations and store the recording as a message in their mailbox. They can then play it or forward it to another subscriber or group of subscribers.	<ul> <li>From the CLI: See         "Configuring Live         Record" on page 254.</li> <li>From the GUI: Use the         Voice Mail &gt; VM         Configuration option and         the online help.</li> </ul>
	Live Reply	Enables Cisco Unity Express subscribers to make a phone call to a voice message's sender while listening to the message, by pressing 4-4.	<ul> <li>From the CLI: See         "Configuring Live Reply"         on page 258.</li> <li>From the GUI: Use the         Voice Mail &gt; VM         Configuration option and         the online help.</li> </ul>
	Script Editor Express	Provides a simplified GUI that enables you to create and modify autoattendant scripts that can be opened/viewed on the Cisco Unity Express editor.	• From the GUI: Use the System > Scripts option (click the New button) and the online help.
	Fixed holidays	Enables you to configure specific dates as fixed or permanent holidays.	<ul> <li>From the CLI: See         "Configuring Holiday         Lists" on page 71.</li> <li>From the GUI: Use the         System &gt; Holiday         Settings option and the         online help.</li> </ul>
	Nonsubscriber message delivery	Enables Cisco Unity Express subscribers to record a voice message and send it to an external number or nonsubscriber. The message can be sent immediately or can be scheduled to be sent in the future, up to 1 year in advance.	<ul> <li>From the CLI: See         "Configuring         Nonsubscriber Message         Delivery" on page 269.</li> <li>From the GUI: Use the         Voice Mail &gt; VM         Configuration option and         the online help.</li> </ul>

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	New method of sending voice mail	Provides Cisco Unity Express script developers with a new step: "Send Voice Message." It enables them to be able to generate a message on the fly by concatenating some prompts and sending it to a Cisco Unity Express subscriber.	No configuration is required for this feature. For more information, see the Cisco Unity Express 3.0 Guide to Writing and Editing Scripts.
	Leaving multiple voice messages in the same session	Enables callers to leave multiple voice messages for the same or different subscriber without having to be transferred to the operator first.	<ul> <li>From the CLI: See         "Configuring         System-Wide Voice-Mail         Parameters" on page 121.</li> <li>This feature cannot be         configured using the GUI.</li> </ul>
	Use of a voice-mail summary prompt during subscriber login	Provides a system-wide configuration option to enable subscribers to hear a summary of the new messages in the corresponding General Delivery Mailboxes (GDMs) during login.	<ul> <li>From the CLI: See         "Configuring         System-Wide Voice-Mail         Parameters" on page 121.</li> <li>This feature cannot be         configured using the GUI.</li> </ul>
	Message properties (envelope) customization	Enables you to customize voice mail message playback preferences, such as whether subscribers hear detailed message properties when they retrieve a message using the TUI.	<ul> <li>From the CLI: See         "Configuring         System-Wide Voice-Mail         Parameters" on page 121.</li> <li>This feature cannot be         configured using the GUI.</li> </ul>
	Default addressing for sending a voice message	Enables you to specify whether voice messages are addressed by name or extension be default at the system level for all features.	<ul> <li>From the CLI: See         "Configuring         System-Wide Voice-Mail         Parameters" on page 121.</li> <li>This feature cannot be         configured using the GUI.</li> </ul>
	Restriction tables	You can now restrict access to the functionality of these features:  • Fax  • Message notification  • Nonsubscriber message delivery  • Live reply	<ul> <li>From the CLI: See         "Configuring Restriction         Tables" on page 279.</li> <li>From the GUI: Use the         System &gt; Restriction         Tables option and use the         online help.</li> </ul>

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	Language support	Enables you to install and use more than one language concurrently on the Cisco Unity Express module.	• From the CLI: See  "Configuring System-Wide Voice-Mail Parameters" on page 121.
			• From the GUI: Use the System > Language Settings option and use the online help.
	Backup and restore using SFTP	Enhances the backup and restore functionality to use the Secure File Transfer Protocol (SFTP) for	• From the CLI: See "Backup and Restore Using SFTP" on page 235.
		transferring files to and from the backup server. SFTP provides data integrity and confidentiality that is not provided by FTP.	<ul> <li>From the GUI: Use the Administration &gt; Backup/Restore option and use the online help.</li> </ul>
	Backup Server Authentication Using a SSH Host Key	Enables you to authenticate the backup server using the SSH protocol before starting a backup/restore operation.	• From the CLI: See "Backup Server Authentication Using a SSH Host Key" on page 236.
			• This feature cannot be configured using the GUI.
	Encryption and Signing of Backup Content on the Server	Enables you to protect backed up configuration and data files using signing and encryption before the files are transferred to the backup server.	• From the CLI: See "Encrypting and Signing of Backup Content on the Server" on page 239.
			• This feature cannot be configured using the GUI.
	Encrypting stored PINs	Before 3.0, PINs were stored as clear text on on the Cisco Unity Express module. Now, they are encrypted.	No configuration is required for this feature.
	Increased password and PIN protection	Provides both temporary and permanent lockout for passwords and PINs to help prevent security breaches.	<ul> <li>From the CLI: See         "Configuring Password         and PIN Parameters" on         page 298.</li> <li>From the GUI: Use the</li> </ul>
			Configure > User Defaults option and use the online help.
	Using HTTPS to access the GUI	You can use HTTPS to secure the transmission of GUI pages between the browser and the Cisco Unity Express sytgem.	No configuration is required for this feature.

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	PIN and Password History	Enables the system to track previous PINs and passwords for all users and prevent users from reusing old PINs and passwords.	<ul> <li>From the CLI: See "Configuring Password and PIN Parameters" on page 298.</li> <li>From the GUI: Use the</li> </ul>
			Configure > User Defaults option and use the online help.
2.3	Support of additional languages	Provides support for several new languages for voice-mail prompts. For Version 2.3, only one can be installed on the system.	See the <i>Release Notes for Cisco Unity Express 2.3</i> for a list of available languages.
	Increased system capacity	Provides support for increased number of mailboxes, increased number of remote and cached users, larger storage capacity, and larger number of public distribution lists.	"Recording a Greeting or Prompt File" on page 53.
	Integrated Messaging	Cisco Unity Express voice-mail subscribers can access and manage their voice messages and e-mail using an e-mail client on a single PC.	• From the CLI: See "Configuring IMAP" on page 249 and "Configuring the Delivery of Future Messages" on page 266.
			<ul> <li>From the GUI: Use the Voice Mail &gt; Integrated Messaging option and the online help.</li> </ul>
	Message Notification	Cisco Unity Express can notify voice-mail subscribers of new voice messages on their cell phones, home	• From the CLI: See "Configuring Message Notification" on page 145.
		phones, work phones, numeric pagers, text pagers, and e-mail inboxes.	<ul> <li>From the GUI: Use the Voice Mail &gt; Message Notification option and the online help.</li> </ul>
	VoiceView Express	Cisco Unity Express voice-mail subscribers can browse, listen, manage, and send voice messages and manage their mailbox options from their Cisco Unified IP phone. VoiceView Express supports only Cisco Unified IP phones 7940, 7941, 7960, 7961, 7970, and 7971.	<ul> <li>From the CLI: See         "Configuring VoiceView         Express" on page 177.</li> <li>From the GUI: Use the         Voice Mail &gt; VoiceView         Express option and the         online help.</li> </ul>
	Future message delivery	Voice-mail subscribers can schedule messages to be delivered at a future time to subscribers on local or remote systems.	"Configuring the Delivery of Future Messages" on page 266.

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	Local broadcast privilege	Voice-mail subscribers with this privilege can send broadcast messages only to other voice-mail subscribers on the local system.	• From the CLI: See "Configuring the Local-Broadcast Privilege" on page 277.
			<ul> <li>From the GUI: Select a group from the Configure</li> <li>Groups option and use the online help.</li> </ul>
	Mailbox selection	This configurable option specifies the mailbox in which a voice message is stored.	• From the CLI: See "Configuring System-Wide Voice-Mail Parameters" on page 121.
			• From the GUI: Use the <b>Defaults &gt; Voice Mail</b> option and use the online help.
	Voice mail box mask	Permits Cisco Unity Express to send a redirected incoming call from Cisco Unified Communications Manager 4.2 to the correct mailbox.	"Unlocking a Voice Mailbox" on page 120.
	Consulting call transfers (SIP Call Control only)	Cisco Unity Express permits attended and semiattended call transfer modes in addition to blind transfers.	"Configuring the Call Transfer Mode" on page 36.
	DTMF relay (SIP Call Control only)	Handles incoming and outgoing DTMF signals for SIP calls.	"Configuring DTMF Options" on page 37.
	MWI Notifications in Cisco SRST mode	Cisco Unity Express includes the MWI status update capability to SRST mode.	• From the CLI: See "Configuring the MWI Notification Option" on page 41.
			• From the GUI: Use the Voice Mail > Message Waiting Indicators > Settings option and use the online help.
	Mandatory message expiry	Forces the subscriber to delete messages when they expire.	• From the CLI: See "Configuring System-Wide Voice-Mail Parameters" on page 121.
			• From the GUI: Use the <b>Defaults &gt; Voice Mail</b> option and use the online help.
	Cisco Unity Express Script Editor enhancements	Enhanced debugging procedures and two new steps are available.	Cisco Unity Express 2.3 Guide to Writing Auto-Attendant Scripts

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	Cisco Unity Express GUI enhancements	New configuration screens and options are available through the Cisco Unity Express GUI. These new options as smimilar to most of the new CLI commands.	Cisco Unity Express 2.3 GUI Administrator Guide
	AvT enhancements	Rerecording existing prompts and returning the status of the alternate greeting are new capabilities for the AvT.	Cisco Unity Express 2.3 AvT Administrator Guide
	Support for Cisco Unified Communications Manager 4.2 and 5.0	Cisco Unity Express now supports two new versions in addition to Cisco Unified Communications Manager 4.1. Previous versions are not supported.	
	Change in AIM-CUE support.	Cisco Unity Express does not support the 512 MB AIM-CUE.	_
2.2	CISCO-UNITY-EXPRESS-MIB	Monitor the health, conduct performance monitoring, data collection, and trap management for Cisco Unity Express voice mail and auto attendant applications.	"Configuring SNMP Monitoring" on page 325
2.1	Additional languages support.	Danish, U.K. English, Latin American Spanish, Italian, and Brazilian Portuguese were added as choices for the default language of the telephone user interface (TUI) system prompts and greetings.	Cisco Unity Express 2.3 Installation and Upgrade Guide
	Distribution lists.	Create public and private distribution lists of local and remote subscribers for sending messages to more than one subscriber.	<ul> <li>From the GUI: Use the Voice Mail &gt; Distribution Lists option and the online help.</li> <li>From the CLI: See "Configuring Distribution Lists" on page 183.</li> </ul>
	Broadcast messages.	Privileged subscribers can send messages to all subscribers on the network.	<ul> <li>From the GUI: Use the Configure &gt; Groups option and the online help.</li> <li>From the CLI: See "Configuring Broadcast Messages" on page 272.</li> </ul>

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	Schedules for holidays and business hours.	Create schedules of holidays and business hours to automatically play alternate auto attendant greetings to callers.	<ul> <li>From the GUI: Use the Voice Mail &gt; Holidays Settings and Voice Mail &gt; Business Hours Settings options and the online help.</li> <li>From the CLI: See "Configuring Business Hours" on page 76 and "Configuring Holiday Lists" on page 71.</li> </ul>
	Increased security for passwords and PINs.	Set minimum lengths and expiry times for passwords and personal identification numbers (PINs).	<ul> <li>From the GUI: Use the Defaults &gt; User option and the online help.</li> <li>From the CLI: See "Configuring Password and PIN Parameters" on page 298.</li> </ul>
	Support for caller ID information in incoming messages.	Permits playing of caller identification information as part of the message envelope for new incoming voice mail messages.	"Configuring Caller ID for Incoming Messages" on page 211.
	Addition of remote subscribers to the local directory.	Adds frequently called remote subscribers to the local directory, which permits local subscribers to address voice mail messages to remote subscribers using dial-by-name and to receive spoken name verification of the remote subscriber address.	<ul> <li>From the GUI: Use the Configure &gt; Remote         Users option and the online help.</li> <li>From the CLI: See         "Adding Remote         Subscribers to the Local         Directory" on page 204.</li> </ul>
	Support for vCard information from remote subscribers.	Permits vCard information from remote subscribers to update their directory entries.	"Configuring a Location with vCard Information" on page 212 and "Configuring the LRU Cache" on page 214.
	Simple auto-attendant script.	Simple aa_simple.aef script is available for handling alternate, holiday, and business hours greetings.	"Configuring and Managing the Auto-Attendant Application" on page 135.
	Undelete voice messages.	Permits subscribers to restore a voice mail message that was deleted during the current voice message retrieval session.	Cisco Unity Express Voice-Mail System User's Guide
	Restore to factory defaults.	Permits the administrator to reset the entire system to the factory default values.	"Restoring Factory Default Values" on page 234.

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	Increased port density.	Network modules with 512 MB of SDRAM now support 16 voice ports. Advanced integration modules (AIMs) running at 300 MHz now support 6 ports on new router platforms.	"Recording a Greeting or Prompt File" on page 53.
	Repurposing of general delivery mailboxes (GDMs)	GDMs may be repurposed as personal mailboxes, which expands the personal mailbox capacity of each license level.	"Configuring Mailboxes" on page 114.
2.0	Support for multiple languages	Multiple languages are available in the telephone user interface (TUI) and auto-attendant prompts.	_
	Streamlined software upgrade process	Modified upgrade process to reduce installation time.	Cisco Unity Express 2.3 Installation and Upgrade Guide
	Increased storage on the AIM	AIM flash storage capacity can be increased from 512 MB to 1 GB and the 1 GB flash can support 14 hours of voice-mail message storage.	"Recording a Greeting or Prompt File" on page 53.
	Housing Cisco Unity Express and Cisco Unified CME software on different routers	Cisco Unity Express software installed on a router communicates with Cisco Unified CME installed on a different router.	_
	Networking across multiple sites	Voice Profile for Internet Mail version 2 (VPIMv2) support for voice-mail messaging interoperability between Cisco Unity Express sites and between Cisco Unity Express and Cisco Unity with NonDelivery Record (NDR) for networked messages and blind addressing.	"Networking Cisco Unity Express" on page 193.
	Support for Cisco Unified Communications Manager Version 3.3(3),3.3(4), and 4.0(1)	Capability of auto detecting the Cisco Unified Communications Manager JTAPI version on a remote system for handling call control and user import functionality.	_
1.1.2	NTP server configuration support	New commands permit configuration of the NTP server.	"Configuring NTP Servers" on page 290.
1.1	Advanced integration module (AIM) card	AIM card with network connectivity through the PCI interface, and access to Cisco IOS software and the console using back-to-back Ethernet through the parallel interface. No external interfaces or cabling is required.	Installing Advanced Integration Modules in Cisco 2600 Series, Cisco 3600 Series, and Cisco 3700 Series Routers

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	Custom auto-attendant script creation using the Cisco Unity Express script editor	Script editor creates custom scripts for handling incoming calls to the automated attendant (AA). Activating a custom script deactivates the default auto-attendant script that ships with Cisco Unity Express. The default script cannot be modified. The network module (NM) and the advanced integration module (AIM) support up to four customized autoattendants.	Cisco Unity Express 2.3 Guide to Writing Auto-Attendant Scripts
	Alternate auto-attendant greetings and prompts	Recording of alternate AA greetings and prompts that can be uploaded or downloaded as needed. These alternate greetings and prompts are in addition to the default greetings and prompts that ship with Cisco Unity Express. The NM supports up to 50 alternate prompts. The AIM supports up to 25 alternate prompts.	"Recording a Greeting or Prompt File" on page 53.
	Access to a greeting management system from the telephone user interface (TUI)	Access from the TUI to a greeting management system (GMS) for recording alternate greetings and prompts. Subscribers with administrative privileges have access to the GMS.	Cisco Unity Express Voice Mail System Quick Start Guide
1.0	Linux-based software	Linux-based software installed on a module card that is installed in the Cisco Unified Communications Manager router. (See the Note in the "Platforms and Cisco IOS Software Images" section on page 1 regarding a UPS device.) The software includes the operating system, application software, and ordered license information.	
	Network module card	Network module card with access to Cisco IOS software using back-to-back Ethernet and console. No external interfaces or cabling is required.	Cisco Network Modules Hardware Installation Guide
	Orderable license packages	Four orderable license packages. A license must be ordered for each voice-mail system. See <i>Release Notes for Cisco Unity Express 3.0</i> for the system capacities available with each license.	"Recording a Greeting or Prompt File" on page 53.

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	Spare modules	Includes factory installed software and license. Upgrades to larger capacity require purchase of a license and download of the license file.	"Recording a Greeting or Prompt File" on page 53.
	License upgrades and downgrades	Upgrades or downgrades from one license size to another.	"Recording a Greeting or Prompt File" on page 53.
	Two administrative interfaces	Two administrative interfaces. (See the "Administration Interfaces" on page 14.)	"Administration Interfaces" on page 14.
	Integrated GUI with Cisco Unified CME	An integrated administration GUI for both Cisco Unity Express and Cisco Unified CME. The integrated interface permits configuration of some Cisco Unified CME parameters, such as telephones and extensions.	Cisco Unity Express 2.3 GUI Administrator Guide
	Bulk provisioning of multiple sites	Bulk provisioning of multiple sites using CLI scripts not provided by Cisco Unity Express. Systems are administered individually.	Cisco Unity Express 2.3 Guide to Writing Auto-Attendant Scripts
	System access anywhere in the IP network	Systems accessible anywhere on the IP network. If the Cisco Unity Express installer uses TFTP, the site running the installer must be closely located to the TFTP server. All other functions use FTP, which allows the servers to be anywhere in the IP network.	
	Manual backup and restore	Manual backup and restore using an FTP server located anywhere in the customer network.	• From the GUI: Use the Administration > Backup/Restore menu option and the online help.
			• From the CLI:  "Backing Up and Restoring Data" on page 223.
	System reports and log files for troubleshooting	Reports are available from the Cisco Unity Express GUI screens. All troubleshooting reports and files are available using the Cisco Unity Express CLI commands.	<ul> <li>From the GUI: Use the Reports &gt; System menu option and the online help.</li> <li>From the CLI: "Troubleshooting" section on page 349.</li> </ul>

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