



Cisco Unity Express 2.1/2.2 GUI Administrator Guide for Cisco CallManager Express

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Cisco Unity Express Feature Roadmap

The *Cisco Unity Express GUI Administrator Guide for CallManager Express* introduces you to the set of graphical interface screens and tasks for configuring, administering, and maintaining Cisco Unity Express voice mail and auto attendant applications.

Comparable command language interface commands are described in the *Cisco Unity Express CLI* Administrator Guide for CallManager Express.

The focus of this guide is the Cisco Unity Express application. It does not provide information on installation of Cisco routers, Cisco network modules, or the Cisco CallManager Express router. For more information about those topics, see "Additional References" on page 20.

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, the Cisco Unity Express commands do not affect the Cisco IOS configuration.

The Cisco Unity Express hardware modules and platforms do use the Cisco IOS command-line interface (CLI) commands for their operation.

See the *Release Notes for Cisco Unity Express Release 2.2* 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 release. Features that are introduced in a particular release are available in that and subsequent releases.

Table 1Cisco Unity Express Features by Release

Release	Features Introduced in That Release ¹	Feature Description	Feature Documentation
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.	Cisco Unity Express Release 2.2 System Monitoring Guide
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.	From the CLI: Cisco Unity Express 2.1/2.2 CLI Administrator Guide for Cisco CallManager
	Distribution lists.	Create public and private distribution lists of local and remote users for sending messages to more than one subscriber.	 From the GUI: See "Voice Mail Menu" on page 54 and the online help. From the CLI: <i>Cisco Unity</i> <i>Express 2.1/2.2 CLI</i> <i>Administrator Guide for</i> <i>Cisco CallManager</i> <i>Express</i>
	Broadcast messages.	Privileged subscribers can send messages to all users on the network.	 From the GUI: See "Voice Mail Menu" on page 54 and the online help. From the CLI: <i>Cisco Unity</i> <i>Express 2.1/2.2 CLI</i> <i>Administrator Guide for</i> <i>Cisco CallManager</i> <i>Express</i>
	Schedules for holidays and business hours.	Create schedules of holidays and business hours to automatically play alternate auto attendant greetings to callers.	 From the GUI: See "Voice Mail Menu" on page 54 and the online help. From the CLI: <i>Cisco Unity</i> <i>Express 2.1/2.2 CLI</i> <i>Administrator Guide for</i> <i>Cisco CallManager</i> <i>Express</i>

Release	Features Introduced in That Release ¹	Feature Description	Feature Documentation
	Increased security for passwords and PINs.	Set minimum lengths and expiry times for passwords and personal identification numbers (PINs).	• From the GUI: See "Defaults Menu" on page 56 and the online help.
			From the CLI: Cisco Unity Express 2.1/2.2 CLI Administrator Guide for Cisco CallManager Express
	Support for caller ID information in incoming messages.	Permit playing of caller identification information as part of the message envelope for new incoming voice mail messages.	Cisco Unity Express 2.1/2.2 CLI Administrator Guide for Cisco CallManager Express
	Addition of remote users to the local directory.	Add frequently called remote users to the local directory, which permits local users to address voice mail messages to remote users using dial-by-name and to receive spoken name verification of the remote user address.	 From the GUI: See "Configure Menu" on page 53 and the online help. From the CLI: <i>Cisco Unity</i> <i>Express</i> 2.1/2.2 <i>CLI</i> <i>Administrator Guide for</i>
	Support for vCard information from	Permit vCard information from	Cisco CallManager Express Cisco Unity Express 2.1/2.2
	remote users.	remote users to update their directory entries.	CLI Administrator Guide for Cisco CallManager Express
	Simple auto attendant script.	Simple aa_simple.aef script is available for handling alternate, holiday, and business hours greetings.	Cisco Unity Express 2.1/2.2 CLI Administrator Guide for Cisco CallManager Express
	Undelete voice messages.	Permits users to restore a voice mail message that was deleted during the current voice message retrieval session.	Cisco Unity Express 2.1/2.2 CLI Administrator Guide for Cisco CallManager
	Restore to factory defaults.	Permits the administrator to reset the entire system to the factory default values.	Cisco Unity Express 2.1/2.2 CLI Administrator Guide for Cisco CallManager Express
	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.	"Software Licenses and Factory-Set Limits" on page 12

 Table 1
 Cisco Unity Express Features by Release (continued)

Release	Features Introduced in That Release ¹	Feature Description	Feature Documentation
	Repurposing of general delivery mailboxes (GDMs)	GDMs may be repurposed as personal mailboxes, which expands the personal mailbox capacity of each license level.	 From the GUI: See "Voice Mail Menu" on page 52 and the online help. From the CLI: <i>Cisco Unity</i> <i>Express 2.1/2.2 CLI</i> <i>Administrator Guide for</i> <i>Cisco CallManager</i> <i>Express</i>
2.0	Support for multiple languages.	Cisco Unity Express supports several languages for the telephone user interface (TUI) and auto attendant prompts. See the <i>Release Notes for</i> <i>Cisco Unity Express Release 2.2</i> for the list of available languages.	"Configuration Data Required for the Initialization Wizard" on page 26
	Streamlined software upgrade process.	Modified upgrade process to reduce installation time.	Cisco Unity Express CLI Administrator Guide for Cisco CallManager Express, Release 2.0
	Increased storage on the AIM.	AIM flash storage capacity is increased from 512MB to 1GB and now supports 14 hours of voice-mail message storage.	"Software Licenses and Factory-Set Limits" on page 15
	Housing Cisco Unity Express and Cisco CallManager Express software on different routers.	Cisco Unity Express software installed on a router communicates with Cisco CallManager Express installed on a different router.	Cisco Unity Express CLI Administrator Guide for Cisco CallManager Express, Release 2.0
	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 Non-Delivery Record (NDR) for networked messages and blind addressing.	Cisco Unity Express CLI Administrator Guide for Cisco CallManager Express, Release 2.0
	Support for Cisco CallManager Release 3.3(3),3.3(4), and 4.0(1).	Capability of auto detecting the Cisco CallManager JTAPI version 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.	Cisco Unity Express CLI Administrator Guide for Cisco CallManager Express, Release 2.0

 Table 1
 Cisco Unity Express Features by Release (continued)

Release	Features Introduced in That Release ¹	Feature Description	Feature Documentation
1.1	Advanced integration module (AIM) card	AIM card has an Intel Celeron 300 MHz processor, 256 MB RAM, and 512 MB of compact flash memory, 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
	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 AIM supports up to four customized auto attendants.	Cisco Unity Express Script Editor Guide
	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 an Auto-Attendant Greeting or Prompt File" on page 14
	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. Users 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 CallManager router. (See the <i>Release Notes for Cisco Unity</i> <i>Express Release 2.2</i> for the supported hardware and software platforms.) The software includes the operating system, application software, and ordered license information.	

Table 1 Cisco Unity Express Features by Release (continued)

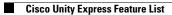
Release	Features Introduced in That Release ¹	Feature Description	Feature Documentation
	Network module card	Network module card with the Intel Low Power PIII 500 MHz processor, a 20 GB IDE hard drive, and access to Cisco IOS software using back-to-back Ethernet and console. No external interfaces or cabling is required.	<i>Cisco Network Modules Hardware Installation Guide</i> , Chapter 22
	Orderable license packages	Four orderable license packages. A license must be ordered for each voice mail system. See Table 2 on page 16 and Table 4 on page 16 for the system capacities available with each license.	"Software Licenses and Factory-Set Limits" on page 15
	Spare modules	Spare modules with factory installed software and license. Upgrades to larger capacity require purchase of a license and download of the license file.	"Software Licenses and Factory-Set Limits" on page 15
	License upgrades and downgrades	Upgrades or downgrades from one license size to another.	"Software Licenses and Factory-Set Limits" on page 15
	Two administrative interfaces	Two administrative interfaces. (See the "Administration Interfaces" on page 18.)	"Administration Interfaces" on page 18
	Integrated GUI with Cisco CallManager Express	An integrated administration GUI for both Cisco Unity Express and Cisco CME. The integrated interface permits configuration of some Cisco CME parameters, such as telephones and extensions.	"Cisco Unity Express Windows and Menus" on page 50
	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 CLI Administrator Guide for Cisco CallManager Express, Release 2.0
	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.	Cisco Unity Express CLI Administrator Guide for Cisco CallManager Express, Release 2.0

Table 1 Cisco Unity Express Features by Release (continued)

Release	Features Introduced in That Release ¹	Feature Description	Feature Documentation
	Manual backup and restore	Manual backup and restore using an FTP server located anywhere in the customer network.	• From the GUI: See "Administration Menu" on page 53 and the online help.
			• From the CLI:
			Cisco Unity Express CLI Administrator Guide for Cisco CallManager Express, Release 2.0
	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	• From the GUI: See "Reports Menu" on page 54 and the online help.
		Express CLI commands.	• From the CLI:
			Cisco Unity Express CLI Administrator Guide for Cisco CallManager Express, Release 2.0

Table 1 Cisco Unity Express Features by Release (continued)

1. Features that are introduced in a particular release are available in that and subsequent releases.





Overview of Cisco Unity Express Voice Mail and Auto Attendant

The Cisco Unity Express voice-mail and auto-attendant applications work with Cisco CallManager and Cisco CallManager Express (CME) to provide small- and medium-sized companies with the capability to:

- Create and maintain voice mailboxes for onsite or remote telephone users. Releases 2.1 and 2.2 support up to 100 mailboxes. The maximum number of mailboxes depends on the hardware module and license agreement purchased for Cisco Unity Express.
- Record and upload messages for callers to hear when they dial the company's telephone number, and prompts to guide the callers to specific extensions or employees.

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- Differences Between Cisco Unity Express and Cisco CME, page 19
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Prerequisites for Implementing Cisco Unity Express on Cisco CME

Before starting Cisco Unity Express configuration, the Cisco CME system must be installed. If you did not or are not performing the Cisco CME installation, contact the installer or other support personnel to ensure that the following procedures are completed:

1. Install all Cisco CME and Cisco Unity Express hardware and verify functionality.

- Attach the telephones so that they register with the Cisco CME router.
- Verify that the Cisco CME router is configured with Cisco IOS Release 12.3(4)T or a later release for the network module (NM) and Cisco IOS Release 12.3(7)T or a later release for the advanced integration module (AIM).
- Install the Cisco Unity Express NM or AIM in the same router where Cisco CME is installed.
- For the NM, verify that the Enable LED is lit.



Caution

If you are installing an AIM in your Cisco 3745 router, you must install it in the AIM slot labeled AIM1. Installing this AIM in the AIM slot labeled AIM0 of Cisco 3745 routers can damage the AIM.



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 IOS Release 12.3(4)T supports automatic switchover to the UPS device if the following configuration is added to the router:

```
line aux 0
privilege level 15
modem Dialin
autocommand service-module service-engine slot/0 shutdown no-confirm
```

where *slot* is the Cisco Unity Express module's slot number.

- 2. Install and verify Cisco CME software functionality.
 - a. You should be able to access the Cisco CME configuration web page.
 - **b.** Verify that the Cisco CME router flash memory has the following files, which control the functionality of the Cisco Unity Express GUI:
 - CiscoLogo.gif
 - Delete.gif
 - Plus.gif
 - Tab.gif
 - admin_user.html
 - admin_user.js

- dom.js
- downarrow.gif
- ephone_admin.html
- logohome.gif
- normal_user.html
- normal_user.js
- sxiconad.gif
- telephony_service.html
- uparrow.gif
- xml-test.html
- xml.template
- **c**. Configure the following path in Cisco CME configuration mode:

Router(config) # ip http path flash:

Verify the path with the **show run** command.

d. To configure the **ip unnumbered** command on the service-engine interface, use the Cisco IOS software commands on the router to create a static route to the Cisco Unity Express module, for example:

```
ip route 0.0.0.0 0.0.0.0 91.91.19.1
ip route 10.3.6.128 255.255.255.255 Service-Engine1/0
```

In this example, 10.3.6.128 is the IP address of the Cisco Unity Express module and Service-Engine1/0 is the router slot hosting the Cisco Unity Express module.

e. Verify that a SIP dial peer is configured to point to the Cisco Unity Express module, that it specifies G.711 U-law and SIP Notify for DTMF Relay, and VAD is turned off, for example:

```
dial-peer voice 6000 voip <----- SIP dial-peer pointing to Cisco Unity Express
destination-pattern 6...
session protocol sipv2
dtmf-relay sip-notify
session target ipv4:10.3.2.100 <---- Cisco Unity Express IP address
codec g711ulaw
no vad</pre>
```

Configure the appropriate number of SIP dial peers to support your dial plan.

- f. The FTP server that communicates with Cisco Unity Express must support passive FTP requests. To configure this functionality on the FTP server, refer to the FTP server documentation.
- **g.** Verify that a Cisco CME web administrator is configured with a user ID and password, for example:

```
telephony-service
.
.
.
web admin system name admin password user1
or
```

web admin system name admin secret 5 encrypted-password

L



If you plan to use the Cisco Unity Express graphical user interface (GUI) for configuration purposes, configure an administrator user ID with a password in the Cisco CME interface. You must log in to the GUI as this user. If no administrator user is created in Cisco CME, the administrator cannot proceed with the initialization wizard in the Cisco Unity Express GUI. In Release 1.1, an administrator is created during the installation procedure.

h. Configure the telephones and users. You can create additional users and telephones later using the Cisco Unity Express CLI commands or GUI options. The CLI commands and GUI options create the telephone users in the Cisco CME database; use a synchronization CLI command or GUI option to copy the users and telephones into the Cisco Unity Express database.

Use the following sample ephone-dn and ephone configurations to configure the telephones and users manually:

```
ephone-dn 1 <---- ephone dn configuration for a user
number 8004
name User1
call-forward busy 6900
call-forward noan 6900 timeout 10
!
!
ephone-dn 20 <---- ephone dn configuration for a group
number 8801
name Salesgroup
call-forward busy 6900
call-forward noan 6900 timeout 10
!
!
```

i. Configure the message waiting indicator (MWI) on and off extensions. Add the wildcard characters (.) to the DNs to represent the length of a telephone extension number. Cisco Unity Express requires these wildcards when importing the MWI DNs from Cisco CME during the initialization wizard. If the wildcard characters are not configured in Cisco CME, the DNs will not appear as available choices in the MWI extension field. For example:

```
ephone-dn 30 <---- ephone-dn configurations for MWI on
number 8000.... <---- valid MWI DN 4-digit extension
mwi on
!
!
ephone-dn 31 <---- ephone-dn configurations for MWI off
number 8001.... <---- valid MWI DN 4-digit extension
mwi off
!
!
ephone 1 <--- ephone configured for the ephone-dn configured above
username "admin1" password null
mac-address 0009.B7F7.556A
button 1:1 2:20 3:21 4:22 5:23
```

3. (Optional) If no users were created in the Cisco CME interface, create a list of all users, groups, and their extensions. Having this list eases the task of configuring many users and extensions.

Note

Designate a primary extension for each user who will receive voice-mail messages. Cisco Unity Express does not activate the MWI for an E.164 number.

- 4. (Optional) Create an alternate welcome message for the auto-attendant application. A default welcome message comes with auto attendant. You can create a different message in a .wav file and install it as part of the auto-attendant configuration. See "Recording an Auto-Attendant Greeting or Prompt File" on page 14 for more information.
- 5. (Optional) Customize the auto-attendant prompt flow to meet your business requirements. See "Configuring Auto-Attendant Scripts" on page 15 for more information.
- 6. (Required) Record the IP address of the Cisco Unity Express module. Accessing the GUI to configure the system requires this IP address.

Restrictions for Implementing Cisco Unity Express

The following restrictions apply to Cisco Unity Express.

Networking

• Cisco Unity Express supports voice-mail networking only with other Cisco Unity Express and Cisco Unity voice-mail systems. Networking support for other voice-mail systems is not available in Cisco Unity Express.

System Functionality

- For the NM, only one person with administrator privileges and four people with user privileges may log in to the GUI simultaneously. For the AIM, only one administrator and two users may log in to the GUI simultaneously.
- Date and time are determined by the NTP server and cannot be set in the Cisco Unity Express software. Cisco Unity Express can be configured as a network transfer protocol (NTP) client. See the NTP configuration section in *Cisco Unity Express 2.1/2.2 CLI Administrator Guide for Cisco CallManager Express* and your NTP server CLI for more information.
- Cisco Unity Express supports one language on the system at a time. See the *Release Notes for Cisco Unity Express Release 2.2* for a list of available languages. This language controls the telephone user interface (TUI) system prompts and greetings. The administrative interfaces (GUI and CLI) are available only in U.S. English. Cisco CallManager Express controls the telephone displays, which may be available in multiple languages, and are independent of the Cisco Unity Express supported languages.

Voice Mail Application

• Cisco Unity Express supports two greetings per user, one standard greeting and one alternate greeting. The greetings' time is included in the user's allotted mailbox storage space.

Hardware Limitations

- Only one Cisco Unity Express module per router chassis is permitted, regardless of the number of module slots in the chassis.
- The AIM cannot be installed in slot 0 of the Cisco 3745 router chassis.
- The NM's front panel Fast Ethernet 0 port is not used by the Cisco Unity Express applications and is disabled. The Fast Ethernet 1 port connects the Cisco Unity Express network module to the router and is the only active Fast Ethernet port on the network module.
- The hard disk on the NM cannot be replaced. If the network module's hard disk crashes, the network module must be replaced.

• Online insertion and removal (OIR) of the Cisco Unity Express NM is available only on the Cisco 3745 and 3845 routers. The replacement module must be the same type as the original module. OIR is not available for the AIM.



If the network module or AIM flash memory card must be replaced, manually shut down the Cisco Unity Express application before removing the module from the chassis to prevent file corruption and data loss.

Backup and Restore

Cisco Unity Express does not support the following backup and restore capabilities:

- Scheduled backup and restore operations. The backup and restore procedures begin when you enter the appropriate command.
- Centralized message storage arrangement. The Cisco Unity Express backup files cannot be used or integrated with other message stores.
- Selective backup and restore. Only full backup and restore functions are available. Individual voice-mail messages or other specific data cannot be stored or retrieved.

Other Restrictions

- Cisco Unity Express is an embedded system and provides no access to the Linux system. Users cannot add other Linux-based applications to the Cisco Unity Express module.
- Cisco Unity Express does not support managing and configuring using Simple Network Management Protocol (SNMP) except for hardware inventory.
- Cisco Unity Express does not support Cisco Networking Services (CNS) or Subnetwork Access Protocol (SNAP) autoprovisioning.
- Cisco Unity Express does not support CiscoWorks configmaker.

Recording an Auto-Attendant Greeting or Prompt File

Two methods are available to create auto-attendant greeting and prompt files:

- Create a .wav file with the following format: G.711 U-law, 8 kHz, 8 bit, Mono. The file cannot be larger than 500 KB. After recording the greeting, use the GUI option Voice Mail > Prompts > Upload or Cisco Unity Express CLI ccn copy command to copy the file in to the Cisco Unity Express system. See the GUI online help (OLH) or the Cisco Unity Express 2.1/2.2 CLI Administrator Guide for Cisco CallManager Express for the upload procedure.
- Use the AvT on the TUI to record the greeting or prompt. Dial the AVT telephone number and select the option to record a greeting. When finished recording, save the file. AVT automatically saves the file in Cisco Unity Express.

The AVT prompt filename has the format UserPrompt_DateTime.wav, for example: UserPrompt_11152003144055.wav. You may want to use CLI commands or GUI options to download the file to a PC, rename the file with a meaningful name, then upload the file back to Cisco Unity Express.

Configuring Auto-Attendant Scripts

Cisco Unity Express provides a set of auto-attendant prompts and a process, called a script, for handling callers' responses to the prompts. You can modify this script so that specific caller responses are handled in a different way. For example, callers can be directed to leave a voice message in a specific mailbox if they call after business hours.

Use the Microsoft Windows software-based script editor software that comes with Cisco Unity Express to modify the script or create a new script. Refer to the *Cisco Unity Express Script Editor Guide* for guidelines and procedures.

The file cannot be larger than 1 MB.

After creating the script file, save the file on your PC. Use the CLI interface or the GUI option **Voice Mail > Scripts** to upload the script file to the auto-attendant application.

Differences Between the AIM and NM

Cisco Unity Express is supported on both the AIM and the NM. Cisco Unity Express features work the same way on both modules with the following exceptions:

- The AIM is a 4-port module that stores a maximum of 50 voice mailboxes and 8 hours of voice messages. The NM is an 8-port module that stores a maximum of 100 voice mailboxes and 100 hours of voice messages.
- A **trace** or **log** command issued on the NM automatically saves the data to the disk. On the AIM, the trace and log data are not saved to flash memory. A Cisco Unity Express CLI command is available to save the data to the AIM flash memory.
- Cisco Unity Express tracks the use and wear activity of the AIM flash memory. This tracking is not necessary for the NM. The CLI command show interface ide 0 and the GUI option Reports > System displays the flash memory wear data.

Software Licenses and Factory-Set Limits

Factory-set system limits are determined by the ordered license. Limits for the NM-CUE and NM-CUE-EC are shown in Table 2 and Table 3. Limits for the AIM-CUE are shown in Table 4 and Table 5.

Cisco Unity Express License/Software SKU	Total Mailbox Storage (Hours)	Default Mailbox Size (Minutes) ¹	Number of Concurrent VoiceMail and Auto Attendant Ports/Sessions	Number of Scripts	Number of Prompts
SCUE-LIC-12CCM SCUE-LIC-12CME	100	353	8 (NM-CUE) 16 (NM-CUE-EC)	8	50
SCUE-LIC-25CCM SCUE-LIC-25CME	100	171	8 (NM-CUE) 16 (NM-CUE-EC)	8	50
SCUE-LIC-50CCM SCUE-LIC-50CME	100	92	8 (NM-CUE) 16 (NM-CUE-EC)	8	50
SCUE-LIC-100CCM SCUE-LIC-100CME	100	50	8 (NM-CUE) 16 (NM-CUE-EC)	8	50

Table 2	System Capacities for Mailboxes, Storage Hours, Ports, Scripts, and Prompts on the NM-CUE and NM-CUE-EC
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1. The default mailbox size calculation includes the allocation for the General Delivery Mailboxes (GDMs).

Table 3 Maximum Number of Mailboxes, Groups, Owners, and Members on the NM-CUE and NM-CUE-EC

Cisco Unity Express License/Software SKU	Default Number of Personal Mailboxes	Default Number of General Delivery Mailboxes	Total Number of Mailboxes	Number of Groups ¹	Number of Owners ¹	Number of Members ¹
SCUE-LIC-12CCM SCUE-LIC-12CME	12	5	17	20	400	880
SCUE-LIC-25CCM SCUE-LIC-25CME	25	10	35	20	400	1000
SCUE-LIC-50CCM SCUE-LIC-50CME	50	15	65	30	400	1000
SCUE-LIC-100CCM SCUE-LIC-100CME	100	20	100	40	400	1000

1. Per Cisco Unity Express system.

System Capacities for Mailboxes, Storage Hours, Ports, Scripts, and Prompts on the AIM-CUE

Cisco Unity Express License/Software SKU	Total Mailbox Storage (Hours) ¹	Default Mailbox Size (Minutes) ²	Number of Concurrent VoiceMail and Auto Attendant Ports/Sessions	Number of Scripts	Number of Prompts
SCUE-LIC-12CCM SCUE-LIC-12CME	14	45	4 (Cisco 2600XM, Cisco 2650XM, Cisco 2651XM, Cisco 2691) 6 (Cisco 2800 series, Cisco 3700 series, Cisco 3800 series)	4	25

Table 4

 Table 4
 System Capacities for Mailboxes, Storage Hours, Ports, Scripts, and Prompts on the AIM-CUE (continued)

Cisco Unity Express License/Software SKU	Total Mailbox Storage (Hours) ¹	Default Mailbox Size (Minutes) ²	Number of Concurrent VoiceMail and Auto Attendant Ports/Sessions	Number of Scripts	Number of Prompts
SCUE-LIC-25CCM SCUE-LIC-25CME	14	22	4 (Cisco 2600XM, Cisco 2650XM, Cisco 2651XM, Cisco 2691) 6 (Cisco 2800 series, Cisco 3700 series, Cisco 3800 series)	4	25
SCUE-LIC-50CCM SCUE-LIC-50CME	14	12	4 (Cisco 2600XM, Cisco 2650XM, Cisco 2651XM, Cisco 2691) 6 (Cisco 2800 series, Cisco 3700 series, Cisco 3800 series)	4	25

1. The storage value shown is for the AIM-CUE with the 1-GB compact flash. The earlier AIM-CUE version with the 512-MB compact flash supports 4.5 hours (270 minutes of mailbox storage. To use Cisco Unity Express 2.1, Cisco recommends that older AIM-CUE modules with 512-MB compact be replaced with the 1-GB compact flash AIM-CUE module.

2. The default mailbox size calculation includes the allocation for the General Delivery Mailboxes (GDMs).

Table 5 Maximum Number of Mailboxes, Groups, Owners, and Members on the AIM-CUE

Cisco Unity Express License/Software SKU	Default Number of Personal Mailboxes	Default Number of General Delivery Mailboxes	Total Number of Mailboxes	Number of Groups	Number of Owners	Number of Members
SCUE-LIC-12CCM SCUE-LIC-12CME	12	5	17	20	100	200
SCUE-LIC-25CCM SCUE-LIC-25CME	25	10	35	20	100	200
SCUE-LIC-50CCM SCUE-LIC-50CME	50	15	65	20	100	200

Networking Cisco Unity Express with Other Voice-Mail Systems

Cisco Unity Express supports the capability to network Cisco Unity Express with a voice-mail system located at a different site. Users can send and receive messages from subscribers on remotely located, compatible voice-mail systems configured on Cisco CallManager or Cisco CallManager Express call control platforms. Supported configurations include:

- Cisco Unity Express to Cisco Unity Express
- Cisco Unity to Cisco Unity Express
- Cisco Unity Express to Cisco Unity

For more information about configuring the networking capability, see *Cisco Unity Express 2.1/2.2 CLI* Administrator Guide for Cisco CallManager Express.

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Administration Interfaces

Cisco Unity Express offers two administration interfaces:

• Graphical user interface (GUI)—This user-friendly, web-based interface permits administration of all voice-mail and auto-attendant functions.

The GUI is targeted for administrators familiar with web-based applications and who have little or no experience with Cisco IOS command structure.

• Command-line interface (CLI)—This text-based interface has the same administration and configuration capabilities as the GUI. Installation, upgrade, and troubleshooting functions are available only through the CLI commands. The administrator accesses this interface through a Telnet session to the router.

The CLI is targeted for installers, resellers, support personnel, and others familiar with Cisco IOS command structure and routers. For them, accessing the system using the CLI may be easier than using the GUI, especially for troubleshooting, scripting, and bulk provisioning of many sites. Refer to the *Cisco Unity Express 2.1/2.2 CLI Administrator Guide for Cisco CallManager Express* for more information about CLI configuration.

The GUI and CLI are accessible from a PC or server anywhere in the IP network. To access the GUI, use Microsoft Internet Explorer Version 6.0 or a later release. See "Overview of the Initialization Wizard" on page 25. Cisco Unity Express does not support the Netscape browser. To access the CLI, Telnet to the router, then use the **service-module** command.

Differences Between Cisco Unity Express and Cisco Unity

Cisco Unity Express is not the same application as Cisco Unity, although both of them are in the Cisco family of voice messaging products, and the differences are:

- Cisco Unity is a Microsoft Windows-based application and uses the Microsoft Windows operating system's messaging infrastructure. Cisco Unity Express is a Linux-based application.
- Cisco Unity is usually deployed in a central location that can be networked with multiple sites. Cisco Unity Express can be deployed in standalone locations that serve the local users.

However, a Cisco Unity Express system can be administered from any location that has IP connectivity with the router housing the Cisco Unity Express application. If several sites in a network use Cisco Unity Express, they can be administered individually from a single PC or server. The administrator opens a browser on a PC or server to the GUI at each site or opens a Telnet session to the CLI at each site.

- Cisco Unity supports 100 or more mailboxes and Cisco Unity Express supports 100 or fewer mailboxes.
- Cisco Unity has a larger set of features than does Cisco Unity Express.

Cisco Unity Express uses Cisco Unity Release 3.1 voice-mail prompt recordings and prompt flow, which provides the end user with the same voice-mail look-and-feel.

Interactions Between Cisco Unity Express and Cisco CME

Cisco CME is the software that controls the telephony functions. Cisco CME resides on a router, which accepts incoming and outgoing calls to your network. Cisco CME contains a call agent, which decides where an incoming or outgoing call should be sent. Cisco CME has a database of information that contains such elements as the telephone hardware identifications, extension numbers associated with the telephones, users on the system, logins, routing destinations, call handling features, and other system-wide parameters.

Cisco Unity Express is an application that enhances Cisco CME by providing the voice messaging and automated attendant capabilities. The Cisco Unity Express module contains the voice-mail and auto-attendant software. During the system installation process, the installer inserts this module into the Cisco CME router. A Cisco Unity Express database contains information about the voice mailboxes, auto-attendant prompts, and voice messages. The Cisco Unity Express and Cisco CME databases are synchronized to ensure that calls are handled correctly and voice messages are received and stored properly.

The integrated Cisco Unity Express and Cisco CME administration software allows you to configure the voice-mail and auto-attendant parameters and some of the Cisco CME parameters, such as extensions and telephones. As you go through the initialization and configuration procedures, be sure to save your data so that both databases have current information.

Differences Between Cisco Unity Express and Cisco CME

Cisco Unity Express is not the same application as Cisco CME, although both of them are in the Cisco family of voice messaging products, and the differences are:

• Cisco CME requires a web administrator to configure the router and other system components. Cisco CME users and administrators are stored in the Cisco CME database. Cisco CME does not treat the web administrator as a telephone user.

Cisco Unity Express permits configured Cisco CME users to be copied into the Cisco Unity Express database. The Cisco CME administrator ID cannot be copied to the Cisco Unity Express database and, therefore, cannot be assigned as the administrator ID for Cisco Unity Express.



Before starting the configuration using the GUI, the Cisco CME administrator must configure at least one telephone user on Cisco CME who will be copied to Cisco Unity Express during the initialization phase and designated as the Cisco Unity Express administrator. You need the Cisco Unity Express administrator's user ID and password to log back in to Cisco Unity Express GUI after the initialization process is completed.

- Cisco Unity Express allows only letters, numbers, and the characters underscore (_), dot (.), and dash (-) in user IDs. Any Cisco CME user IDs containing other characters cannot be copied into the Cisco Unity Express database. User IDs must start with a letter.
- Spaces are not allowed in passwords. Acceptable password characters are lowercase letters a through z, uppercase letters A through Z, digits 0 through 9, and the following symbols: , . + = _ ! @ # \$ ^ * () ? / ~ <> & %
- In Release 1.0, user IDs and passwords are case sensitive.

Additional References

The following sections provide references related to Cisco Unity Express.

Documents Related to Cisco Unity Express

Related Topic	Document Title		
Cisco Unity Express administration	Cisco Unity Express 2.1/2.2 CLI Administrator Guide for Cisco CallManager		
	• Cisco Unity Express 2.1/2.2 GUI Administrator Guide for Cisco CallManager		
	• Cisco Unity Express 2.1/2.2 CLI Administrator Guide for Cisco CallManager Express		
	• Cisco Unity Express 2.1/2.2 GUI Administrator Guide for Cisco CallManager Express		
	Cisco Unity Express Command Reference		
	Cisco Unity Express AvT Administrator Guide		
	Release Notes for Cisco Unity Express 2.2		
Cisco Unity Express voice-mail scripts	Cisco Unity Express 2.2 Script Editor Guide		
Cisco Unity Express voice-mail end user information	Cisco Unity Express User Guides		
Cisco module hardware installation	Cisco Network Modules Hardware Installation Guide, Chapter 22		
	• Installing Advanced Integration Modules in Cisco 2600 Series, Cisco 3600 Series, and Cisco 3700 Series Routers		
	Advanced Integration Module Quick Start Guide		
	• Replacing Compact Flash Memory on Cisco AIM-CUE Advanced Integration Modules		
	• AIM-CUE Slot Restriction on Cisco 3745 Routers		
Cisco Unity Express software copyrights and licenses	"Appendix A: Software Copyrights and Licenses" on page 71		
Technical Assistance Center support documentation for Cisco Unity Express	Technical Notes for Cisco Unity Express		

Related Topic	Document Title	
Cisco CallManager	Release 4.1(3)	
	• Cisco CallManager Administration Guide, Release 4.1(3)	
	• Cisco CallManager System Guide, Release 4.1(3)	
	• Cisco CallManager Features and Services Guide, Release 4.1(3)	
	Release 4.1(2)	
	• Cisco CallManager Administration Guide, Release 4.1(2)	
	• Cisco CallManager System Guide, Release 4.1(2)	
	• Cisco CallManager Features and Services Guide, Release 4.1(2)	
	Release 4.0(1):	
	• Cisco CallManager Administration Guide, Release 4.0(1)	
	• Cisco CallManager System Guide, Release 4.0(1)	
	• Cisco CallManager Features and Services Guide, Release 4.0(1)	
	Release 3.3(4)	
	• Cisco CallManager Administration Guide, Release 3.3(4)	
	• Cisco CallManager System Guide, Release 3.3(4)	
	• Cisco CallManager Features and Services Guide, Release 3.3(4)	
	Release 3.3(3):	
	• Cisco CallManager Administration Guide, Release 3.3(3)	
	• Cisco CallManager System Guide, Release 3.3(3)	
	• Cisco CallManager Features and Services Guide, Release 3.3(3)	

Related Topic	Document Title		
Cisco CallManager Express	Release 3.4:		
	• Cisco CallManager Express 3.4 Configuration Guide		
	• Cisco CallManager Express 3.4 Command Reference		
	Release 3.3:		
	• Cisco CallManager Express 3.3 System Administrator Guide		
	• Cisco CallManager Express 3.3 Command Reference		
	Release 3.2:		
	• Cisco CallManager Express 3.2 System Administrator Guide		
	• Cisco CallManager Express 3.2 Command Reference		
	• TAPI Developer Guide for Cisco CME/SRST		
	• XML Developer Guide for Cisco CME/SRST		
	• Integrating Cisco CallManager Express and Cisco Unity Express		
	Release 3.0:		
	• Cisco CallManager Express System Administrator Guide 3.0		
	• Cisco CallManager Express Command Reference 3.0		
	• Cisco SRST System Administrator's Guide Version 3.0		
	• Integrating Cisco CallManager Express Versions 3.0 and 3.1 with Cisco Unity Express		
Cisco Unity	Networking in Cisco Unity Guide		
Cisco hardware platforms	Cisco 2600 Series Hardware Installation Guide		
	Cisco 2600 series hardware configuration notes		
	• Voice features on Cisco 2600 series routers		
	Cisco 2800 Series Hardware Installation		
	Cisco 3700 Series Hardware Installation Guide		
	Cisco 3700 series hardware configuration notes		
	Software Configuration Guide		
	Cisco 3800 Series Hardware Installation		

Related Cisco IOS Documents

Related Topic	Document Title	
Cisco IOS configuration	Cisco IOS Debug Command Reference, Release 12.4T	
	Cisco IOS Voice Command Reference	
	Note For general voice configuration topics, refer to the <i>Cisco IOS Voice Configuration Library, Release 12.4.</i>	
Cisco IOS configuration examples	Cisco Systems Technologies website at http://cisco.com/en/US/tech/index.html	
	 Note From the website, choose a technology category and subsequent hierarchy of subcategories, and then click Technical Documentation > Configuration Examples. 	
Cisco IOS voice troubleshooting information	Cisco IOS Voice Troubleshooting and Monitoring Guide	
Cisco IP Telephony	IP Telephony Solution Reference Network Design Guide	

MIBs

MIBs	MIBs Link
	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL: http://www.cisco.com/go/mibs

RFCs

RFCs Title	
1869	SMTP Service Extensions
1893	Enhanced Mail System Status Codes
2045	Multipurpose Internet Mail Extensions Part One: Format of Internet Message Bodies, RFC
2421	Voice Profile for Internet Mail - Version 2
2821	Simple Mail Transfer Protocol

Technical Assistance

Description	Link
Technical Assistance Center (TAC) home page, containing 30,000 pages of searchable technical content, including links to products, technologies, solutions, technical tips, and tools. Registered Cisco.com users can log in from this page to access even more content.	http://www.cisco.com/public/support/tac/home.shtml





Configuring the System Using the Initialization Wizard

This chapter describes the initial configuration process and contains the following sections:

- Overview of the Initialization Wizard, page 25
- Starting the Initialization Wizard for Cisco CME, page 29



You must use Microsoft Internet Explorer Version 6.0 or later as the web browser. The Netscape browser is not supported on Cisco Unity Express.

Overview of the Initialization Wizard

After the hardware and software are installed, start the Cisco Unity Express GUI. The GUI allows you to configure users, voice mailboxes, and other features of voice mail and auto attendant.

This section describes the procedures and information required to use the initialization wizard and contains the following sections:

- Description of the Initialization Wizard, page 25
- Configuration Data Required for the Initialization Wizard, page 26
- Activity Timer, page 28
- Buttons on the Initialization Wizard Windows, page 28

Description of the Initialization Wizard

The initialization wizard is a software tool with a series of windows that help you configure Cisco Unity Express. The wizard starts automatically the first time you log in to the GUI.

Some of the information shown on the wizard windows comes from system parameters configured during the installation of the Cisco CallManager or Cisco CallManager Express (CME) system, including:

- Telephone users and their extensions.
- IP address of the Cisco CME router.
- Message waiting indicator (MWI) on and off telephone numbers.

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The remaining wizard information consists of default values calculated by Cisco Unity Express or values you must supply, including:

- Cisco Unity Express administrator user ID and password.
- Users who should be assigned mailboxes.
- Primary extension for each user, especially for users who have more than one extension.
- Users who will be assigned administrative privilege.s
- Users who will be assigned Call Forward No Answer/Call Forward Busy (CFNA/CFB) privileges.
- Size of a new mailbox.
- Maximum length of a voice-mail message.
- Length of time a message can be stored on the system.
- Whether passwords and personal identification numbers (PINs) are required for new users.
- Telephone numbers for accessing the voice-mail system, the auto-attendant system, the operator, and the AVT.

These values are described in more detail in the next section, "Configuration Data Required for the Initialization Wizard".

When you have entered all the data required in the wizard windows, the system updates the Cisco Unity Express and Cisco CallManager or Cisco CME databases with this new information. At that point, you can log in to the system and add or modify the information for any user, mailbox, or system component.

Configuration Data Required for the Initialization Wizard

A series of windows appear that require the following information:

- (Required) To start the initialization wizard, you need the IP address of the module that contains the Cisco Unity Express application.
- (Required) Your Cisco CME web administrator user name and password

Cisco CME requires an administrator to configure the router and other system components. The system installer creates a user ID and password that is used to log in to the system and configure the Cisco CME hardware and software parameters.

Cisco CME does not treat this administrator as a telephone user.

The Cisco CME administrator cannot configure Cisco Unity Express. During the post-installation process, the system installer creates a user ID and password as an administrator who will log in to the Cisco Unity Express software to configure the Cisco Unity Express applications and other parameters.

• (Required) The name, user ID, and extension number for each telephone user, whether each user will require a voice mailbox, and which users will be identified as administrators. Administrators have full access to all the voice-mail and auto-attendant parameters. Nonadministrative voice-mail users have limited access to system configuration tasks.

Users may have been configured on the Cisco CallManager or Cisco CME software. You may copy some or all of these users to the Cisco Unity Express database.

Some users or extensions may not require a voice mailbox. For example, a lobby extension, a conference room extension, or a visitor office extension should not be assigned a mailbox. Review the purpose of each extension carefully so that mailbox storage space is used efficiently.

- (Required) The users who will have the Call Forward No Answer/Call Forward Busy (CFNA/CFB) feature enabled on their extensions.
- (Required) The policy for handling passwords and personal identification numbers (PINs).



Note You must determine the level of security for your voice-mail system. Requiring new users to have a password to access the GUI and a PIN to access their voice mailbox helps discourage unauthorized personnel from gaining entry to the system or to another user's mailbox. However, not assigning a password and PIN makes it easier for a user to enter the system or mailbox the first time.

Decide whether Cisco Unity Express should generate a random password and a random PIN for each new user or if the password and PIN should be blank. In either case, each new user and each user copied from Cisco CallManager or Cisco CME are required to change the password and the PIN when logging in to the system for the first time.

• (Optional) The default language that the user hears when accessing the voice-mail system.

The default language was selected at the time of purchase of Cisco Unity Express. See the *Release Notes for Cisco Unity Express Release 2.2* for a list of available languages.

• (Optional) The default mailbox size.

The mailbox size represents the total number of seconds from all messages stored in a user's box. Cisco Unity Express calculates a default value based on the maximum number of mailboxes and the maximum storage space on the system. You can change the size value for individual users who require more or less storage space than the default.

• (Optional) The default message length.

The message size represents the maximum number of seconds for any message stored in a voice mailbox. Callers who try to leave a longer message will be cut off when the maximum time is reached. Cisco Unity Express calculates a default value based on the default storage space for a mailbox. You can change the length value for individual users who require longer messages than the default.

• (Optional) The default message storage time.

The message storage time is the number of days for which the system will save old messages. As a message approaches this storage time, the system alerts the user to resave or delete the message. If the user takes no action when the maximum storage time is reached, the system deletes the message.

- (Required) Telephone numbers for:
 - Voice-mail system

Users dial the voice-mail system telephone number to retrieve their voice messages.

- Voice-mail operator extension

While in the voice-mail system, users dial the voice-mail operator extension number to reach the voice-mail operator.

- Auto attendant

Callers dial the auto-attendant telephone number to reach the auto-attendant system.

- Auto-attendant operator extension

The auto-attendant application dials the auto-attendant operator extension number when a caller presses "0" for the operator.

- Administration via Telephone (AVT) number

Administrators dial the AVT number to access the AVT to modify or create prompts and greetings.



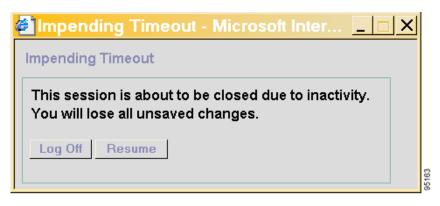
The voice-mail telephone number, auto-attendant telephone number, and AVT number should be unique values. If they are not, a user who tries to call the operator while in the voice-mail system will be directed back to the voice-mail system or the AVT. Also, an outside caller who presses the button for the operator might be connected to the voice-mail system or the AVT.

• (Optional) MWI on and off numbers

The MWI on and off telephone numbers are dialed with an extension number to turn the extension's message waiting light on or off. These numbers appear on an initialization wizard window if they were configured during the Cisco CME installation. You may change the numbers during the initialization procedure or at a later time.

Activity Timer

The system has a timer that checks if the GUI is being used. If the GUI has been started but no windows or fields are accessed for a while, the system displays the following window shortly before the timer expires:



If you do not click **Resume**, the system will cancel your activity and log you off the GUI. Data that was not saved is lost. Be sure to have all the appropriate configuration information available while you run the initialization wizard.

Buttons on the Initialization Wizard Windows

Table 6 describes the buttons used only on the initialization wizard windows. None of the other GUI windows use them.

Table 6 Initialization Wizard Window Buttons

Button	Purpose
Back	Click to return to a previous window.
Next	Click to move to the next window.

Button	Purpose
Finish	Click to end the initialization procedure and save the data to the databases.
Cancel	Click to stop the initialization procedure. Your data entries will not be save.
Help	Click to open a help window with information about the fields on the window.

Table 6 Initialization Wizard Window Buttons (continued)

Starting the Initialization Wizard for Cisco CME

Follow these steps to begin the initialization wizard for Cisco CME systems.

- Step 1 On your PC, open your web browser (Microsoft Internet Explorer Version 6.0 or later is preferred).
- **Step 2** In the **Address** box, enter **http://a.b.c.d/Web**, where **a.b.c.d** is the IP address of the module. Be sure to enter **Web** with upper- and lowercase letters as shown here.

The Authentication window appears:

Cisco Unity Express Voice Mail / Auto Attendant			
	Authentication System is not initialized User Name: Password:	. Only Administrator logins are allowed.	88561

Step 3 In the User Name field, enter the user ID for the Cisco Unity Express administrator. The user ID is case-sensitive; be sure to type the user ID with correct upper- and lowercase letters.

Note

This administrator ID and the password were created by the installer during the software installation process. This ID is used only for logging in to Cisco Unity Express and is not considered a telephone user.

Step 4 Tab to or click on the Password field and enter the password for the Cisco Unity Express administrator. The password is case-sensitive; be sure to type the password with correct upper- and lowercase letters. Asterisks (*) will appear for each character in the password.

Step 5 Click Login.

The Cisco Unity Express window appears:

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The following options are available from this window:

- View current settings—Use this option to display several system parameters that were defined when the Cisco CME software was installed. See Step 6 below.
- **Run Initialization Wizard**—Use this option to start the initialization wizard configuration procedure. See Step 8 below.
- Skip Initialization Wizard and Log off—Use this option only if you are using the Cisco Unity Express CLI command interface to configure the system parameters.
- Log off (Run Initialization Wizard later)—Use this option to log off the system without starting the initialization wizard. You may run the initialization wizard at a later time.
- **Step 6** To display the current settings for system parameters, click **View current settings**.

The Current Settings window appears:

Current Settings		
XCancel 😨 Help		
Language:	German (Germany)	
Mailbox Size:	3000 seconds	
Maximum Caller Message Size:	60 seconds	
Message Expiry Time:	30 days	
Voice Mail Number:		
Auto Attendant Access Number:		
Voice Mail Operator Extension:	0	
Auto Attendant Operator Extension:	0	
Administration via Telephone Call-in number:		
MWI on Number:	8000	
MWI off Number:	8001	731
		127731

These values were configured during the Cisco CME application installation. They cannot be changed from this window. Run the initialization wizard to change the values.

- Step 7 Click Cancel to close this window. The Cisco Unity Express window appears again.
- Step 8 To start the initialization wizard, click Run Initialization Wizard.

The CallManager Express Login window appears:

Steps D CallManager Express Login D Import CCME Users D Offaults D Call Handling D Commit	CallManager Express Login Enter the details of the Cisco CallManager Express that Cisco Unity Express will connect to. The user name and password will be used to authenticate while retrieving information from the Cisco CallManager Express. Hostname: 10.100.6.9 User Name *:
	* indicates a mandatory field

- **Step 9** The IP address of the Cisco CME router appears in the **Hostname** field. This value was configured during the Cisco CME s installation and cannot be changed here.
- Step 10 In the User Name field, enter the Cisco CME web administrator user ID.
- **Step 11** In the **Password** field, enter the Cisco CME web administrator password.
- Step 12 Click Next.

The Import CCME Users window appears:

teps 1 <u>CallManager</u> Express Login 2 Import CCME Users 3 Defaults	Import CCME Users The selected users will be imported to Cisco Unity Express. For each selected user, choose a unique primary extension, whether to create a mailbox and whether to give administrative rights. 36 result(s)							
ロ4 Call Handling ロ5 Commit		User ID	Extension(s)	Primary Extension	🗖 Mailb	o 🗖 Administr	at CFNA/CFB	
		user1	5001, 5049	5001 💌				-
		user12	5012, 5060	5012 💌	V	V		
		user13	5013, 5061	5013 💌	N			
		user14	5014, 5062	5014 💌	V			
		user15	5015, 5063	5015 💌	N	N		
		user16	5016, 5064	5016 💌				
		user18	5018, 5066	5018 💌				•

Use this window to copy user data configured on Cisco CME to the Cisco Unity Express database. This window displays any users who were configured when the Cisco CME software was installed. You can copy any or all of those users in to the Cisco Unity Express database. A check mark automatically appears next to each user name.

Table 7 describes the columns on this window:

Table 7 Import Users Window Columns

Column	Description
User ID	ID of the telephone user.
Extension(s)	Extension or extensions assigned to the user.
Primary	User's extension that should be assigned to the voice-mailbox.
Mailbox	Option to create a mailbox for the user.

Column	Description
	Option to assign one or more users the permission to configure the parameters for the Cisco Unity Express system.
Set CFNA/CFB	Option to enable the Call Forward No Answer/Call Forward Busy feature for the user.

Table 7 Import Users Window Columns (con	ontinued)
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Step 13 Do one of the following:

- If no users are displayed, go to Step 19. Configure users after the initialization process is completed.
- If any users are listed, go to Step 14.
- **Step 14** All the users in the list will be copied to the Cisco Unity Express database unless you remove the check marks next to the user IDs. In the column to the left of the users' names, do one of the following:
 - To copy all the users in the list to the Cisco Unity Express database, leave the check marks as they are and go to Step 15.
 - To remove a check mark, check the box next to each user ID that should not be copied to the Cisco Unity Express database. Users who are not in the Cisco Unity Express database will not have a voice mailbox.
- **Step 15** In the **Primary** column, use the drop-down menu to select a primary extension for that user.

The primary extension is the mailbox for saving and retrieving voice-mail messages. If no primary extension is designated for a user, that user cannot receive or retrieve voice-mail messages.

In this field, **None** means that none of the displayed extensions for the user are the primary extension. You can designate a mailbox for this user now, but the user cannot access it until you configure the user's primary extension at a later time.

- **Step 16** In the **Mailbox** column, do one of the following:
 - To create a mailbox for all users, check the box next to **Mailbox**. This places a check mark in each user's box in the column. Cisco Unity Express creates the mailbox when the initialization process is complete.



Checking this box creates a mailbox for all users displayed in the list. If you selected specific users in Step 14, do not check this box.

- To create a mailbox for specific users, check the box in the **Mailbox** column for each user who should have a mailbox.
- **Step 17** In the **Administrator** column, do one of the following:



Administrators have access to all system configuration and maintenance capabilities.

- To allow all users to configure the Cisco Unity Express system, check the box next to **Administrator**. If you selected specific users in Step 14, do not check this box.
- To allow specific users to configure the system, check the box in the **Administrator** column next to each user who should have this permission.

Step 18 In the Set CFNA/CFB field, do one of the following:

- To allow all users to have the Call Forward No Answer/Call Forward Busy capability enabled, check the box next to **Set CFNA/CFB**. If you selected specific users in **Step 14**, do not check this box.
- To allow specific users to have the Call Forward No Answer/Call Forward Busy capability, check the box in the **Set CFNA/CFB** column next to each user who should have this permission.

Step 19 Click Next.

The **Defaults** window appears:

Cisco Unity Express Initial	ization Wizard	
Steps * 1 CallManager Express Login * 2 Import CCME Users I 3 Defaults I 4 Call Handling I 5 Commit	Password & PIN options © Generate random password © Blank pa © Generate random PIN © Blank PI Mailbox Defaults Mailbox Size *: Maximum Caller Message Size *: Message Expiry Time *: * indicates a mandatory field	PIN is used for telephone logins. Users will upon next login. Inited States) Inited States) Inited States) Issword N 3000 seconds 60 seconds 30 days
		Next Finish Cancel Help

The values shown on this window are Cisco Unity Express default values. These values affect all users and mailboxes in the voice-mail system.

- **Step 20** The **Language** field indicates the language used for all voice-mail system messages and prompts heard by the telephone user. In Release 2.0and later, the language purchased with Cisco Unity Express appears.
- Step 21 In the Password & PIN options fields, do the following:

 \triangle

Caution

You must determine the level of security for your voice-mail system. Requiring a new user to have a password to access the GUI and a PIN to access the voice mailbox helps discourage unauthorized personnel from gaining entry to the system or to another user's mailbox. However, not assigning a password and PIN makes it easier for a user to enter the system or mailbox the first time. Decide whether Cisco Unity Express should generate a random password and a random PIN for each new user or if the password and PIN should be blank. In either case, the user is required to change the password and the PIN when logging in to the system for the first time.

• The default is to generate a random password for each user. To leave the password blank for all new users, click the radio button **Blank password**.

• The default is to generate a random PIN for each user. To leave the PIN blank for all new users, click the radio button **Blank PIN**.

The values in the next three fields are automatically assigned to all new mailboxes.

- **Step 22** In the **Mailbox Size** field, enter the maximum number of seconds of stored messages allowed for each mailbox.
- **Step 23** In the **Maximum Caller Message Size** field, enter the number of seconds for the maximum length of any message stored in the voice-mail system.
- **Step 24** In the **Message Expiry Time** field, enter the number of days for which old messages are stored. When a message has been stored for this length of time, the user can resave it or delete it.
- Step 25 Click Next.

The Call Handling window appears:

Steps	Call Handling	
≪1 <u>CallManager</u> Express Login ≪2 <u>Import CCME</u> Users	Enter the Call in Numbers for Voice Mail, Aut telephone (AVT) system.	o Attendant and the Administration
₫3 <u>Defaults</u>	Voice Mail Number *:	5000
□4 Call Handling □5Commit	Voice Mail Operator Extension *:	1000
	Auto Attendant Access Number:	12225550150
	Auto Attendant Operator Extension:	8000
	Administration via Telephone Number:	1111
	MWI on Number :	2222 💌
	MWI off Number :	2221 💌
	* indicates a mandatory field	

If these fields were not previously configured using the Cisco Unity Express CLI commands, they will be blank.

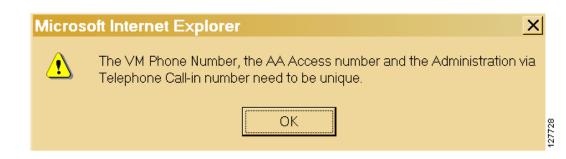


The Voice Mail Number field, Auto Attendant Access Number field, and Administration via Telephone Number field should contain different values. If they do not, then a user who tries to call the operator while in the voice-mail system will be directed back to the voice-mail system or the AVT. Also, an outside caller who tries to get to the operator will be connected to the voice-mail system or the AVT.

- **Step 26** In the **Voice Mail Number** field, enter the telephone number that users dial to retrieve their voice messages. The telephone number should not have spaces, dashes, or periods.
- Step 27 In the Voice Mail Operator Extension field, enter the telephone extension for the voice-mail operator.A voice-mail user dials this extension to reach the operator.
- **Step 28** (Optional) In the **Auto Attendant Access Number** field, enter the telephone number that callers dial to access the auto attendant.

- **Step 29** (Optional) In the **Auto Attendant Operator Extension** field, enter the telephone extension for the auto-attendant operator. Auto attendant dials this extension when the caller presses "0" for the operator.
- Step 30 (Optional) In the Administration via Telephone Number field, enter the telephone number or extension that administrators dial to access the AVT. (Administrators access the AVT to modify or create prompts and greetings.)
- Step 31 (Optional) In the MWI on Number field, enter a different extension. The system uses this extension together with the user's extension to turn on the user's MWI light.
- **Step 32** (Optional) In the **MWI off Number** field, enter a different extension. The system uses this extension together with the user's extension to turn off the user's MWI light.
- Step 33 Click Next.

If any two of the **Voice Mail Number**, **Auto Attendant Access Number**, and **Administration via Telephone Number** fields have the same number, an error message appears:



Step 34 Click OK and repeat Step 26 to Step 33.

The first of two **Commit** windows appears:

Steps	Commit		
I <u>CallManager</u> <u>Express Login</u>	You have chosen to set/add:		
≪2 <u>Import CCME</u> Users	Hostname	1.100.6.9	
✓3 Defaults	Web User Name	gayle	
≪4 <u>Call Handling</u>	Import Users	36	
⊒5 Commit	Create Mailboxes	14	
	Administrators	3	
	Language	English (United States)	_
	Mailbox Size	3000	
	Maximum Caller Message Size	60	
	Message Expiry Time	30	
	Voice Mail Number	5000	_
	Click on Finish to commit the initialization	. Note: This operation is not revers	sible.
	Finally, save to startup configuration (v	vill take a few minutes more).	
	(······································	

This window displays the current values of the initialization parameters. Use the scrollbar to view the other parameters:

Steps	Commit	
✓1 CallManager Express Login	You have chosen to set/add:	
≤2 Import CCME	Mailbox Size	3000
<u>Users</u> ≤3Defaults	Maximum Caller Message Size	60
	Message Expiry Time	30
≪4 <u>Call Handling</u>	Voice Mail Number	5000
¤5 Commit	Auto Attendant Access Number	12225550150
	Voice Mail Operator Extension	1000
	Auto Attendant Operator Extension	8000
	Administration via Telephone Number	1111
	MWI on Number	2222
	MWI off Number	2221
	Click on Finish to commit the initialization.	Note: This operation is not reversible.
	Finally, save to startup configuration (will	
	· · · · · · · · · · · · · · · · · · ·	take a lew minates more).

At this point, none of these values has been saved to the Cisco Unity Express database.

- Step 35 If any value is not correct, click Back to return to the appropriate window and change the value.
- Step 36 When all the values are correct, check the box next to Finally to save the values.

MWI off Number	2221	T
Click on Finish to commit the initialization. Not	e: This operation is not reversible.	
✓ Finally, save to startup configuration (will ta	ke a few minutes more).	

Step 37 Click **Finish** to complete the initialization.

The default values are stored in the Cisco Unity Express database. The Administrators group is created.



You can change any of these parameters by using other menu options described in "Navigating Through the Cisco Unity Express GUI Windows" on page 47.

The Initialization Wizard Status window appears:

User ID user1 user12 user13 user14 user15 user16	ettin 824 eggd852952 fvz130586 vbm522770 clt187821 dqc616824	Password	8807	PIN
user12 user13 user14 user15 user16	fvz130586 vbm522770 clt187821			_
user13 user14 user15 user16	vbm522770 clt187821		8550	
user14 user15 user16	clt187821		10000	
user15 user16			3556	
user16	dac616824		1310	
			8811	
	tcj485544		4009	
user18	bwk697010		8492	
user22	chx754675		4437	
Defaults:		Updated		
User Creation:		36 Success		
Mailbox Creation:		14 Success		
Voicemail applica	tion creation:	Success		
Auto Attendant ap	plication creation:	Success		
Administration via application creati		Success		
MWI application of	reation:	Success		
IOS CLI update:		Success		
Save to startup co	nfiguration:	Success		

Table 8 describes the fields on this window.

Table 8 Initialization Wizard Status Window Fields

Field	Description
User ID	Login ID of each user copied from the Cisco CME database.
Password	Password generated for each user ID. If you selected Blank Password in the Defaults window, this column is blank.
PIN	PIN generated for each user ID. If you selected Blank PIN in the Defaults window, this column is blank
Defaults	Status of mailbox size, message length, message expiration time, password and PIN generation, and MWI on and off numbers.
User Creation	Status of creating the selected Cisco CME users in the Cisco Unity Express database.
Mailbox Creation	Status of creating voice mailboxes for the selected users.

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Field	Description
Voicemail application creation	Status of initializing the voice-mail system and storing the voice-mail system telephone number.
Auto Attendant application creation	Status of initializing the default auto-attendant application and storing the auto-attendant telephone number.
Administration via Telephone application creation	Status of initializing the AVT application and storing the AVT telephone number.
MWI application creation	Status of initializing the MWI application and storing the MWI extension numbers.
IOS CLI update	Status of updating the corresponding Cisco IOS CLI commands with the options and values entered in the initialization wizard fields, including the enabling of the CFNA/CFB feature on specified extensions.
Save to startup configuration	Status of saving the options and values entered in the initialization wizard fields to the startup configuration database.

Table 8 Initialization Wizard Status Window Fields (continued)

Note If **Failed** appears in any of the status fields, contact the person who installed your system for assistance.

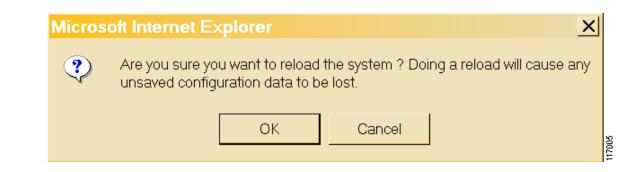
Step 38 Write down the user IDs and passwords for the users. Keep them in a secure place.

- Use the administrator's user ID and password to log back in to Cisco Unity Express.
- Give these user IDs and passwords to the users so that they can log in to their voice mailboxes.
- **Step 39** Do one of the following:



You must reload Cisco Unity Express to update the databases with the users and values entered in the initialization wizard.

- Click **Logout** to exit the initialization wizard. Cisco Unity Express and Cisco CME do not update their databases with the values entered on these windows.
- Click **Reload Unity Express** to update the Cisco Unity Express and Cisco CME databases. A verification window appears:



I

Do one of the following:

- Click **OK** to start the reload. As the databases are updated, the window may pause or the **Logged Out** window may appear but may not respond for a short while.
- Click **Cancel** to continue without reloading.

The Logged Out window appears:

 Cisco Unity Express Voice Mail / Auto Attendant

 Image: Cisco Unity Express Voice Mail / Auto Attendant

 Image: Cisco Unity Express Voice Mail / Auto Attendant

 Image: Cisco Unity Express Voice Mail / Auto Attendant

 Image: Cisco Unity Express Voice Mail / Auto Attendant

 Image: Cisco Unity Express Voice Mail / Auto Attendant

 Image: Cisco Unity Express Voice Mail / Auto Attendant

 Image: Cisco Unity Express Voice Mail / Auto Attendant

 Image: Cisco Unity Express Voice Mail / Auto Attendant

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 Image: Cisco Unity Express Voice Mail / Auto Attendant

 Image: Cisco Unity Express Voice Mail / Auto Attendant

 Image: Cisco Unity Express Voice Mail / Auto Attendant

 Image: Cisco Unity Express Voice Mail / Auto Attendant

 Image: Cisco Unity Express Voice Mail / Auto Attendant

 Image: Cisco Unity Express Voice Mail / Auto Attendant

Step 40 Click Login again to enter the GUI administration environment.

See "Logging In to Voice-Mail Administration for the First Time" on page 41 to change your password and to start Cisco Unity Express.



Logging In and Out of Cisco Unity Express

This chapter describes processes for logging in and logging out and contains the following sections:

- Logging In to Voice-Mail Administration for the First Time, page 41
- Logging In to Cisco Unity Express, page 44
- Logging Out of Cisco Unity Express, page 46



You must use Microsoft Internet Explorer Version 6.0 or later as the web browser. The Netscape browser is not supported on Cisco Unity Express.

Logging In to Voice-Mail Administration for the First Time

Use this procedure the first time you log in to the voice-mail system. The system asks you to create a new password.

Prerequisites

You will need the following information to log in to Cisco Unity Express for the first time:

- IP address of the Cisco Unity Express module.
- If you or another administrator selected the random password generation option during the initialization procedure, you need the random password generated for you by the system. If the blank password option was selected, you do not need a password to access the system.
- A new password, 3 to 21 characters in length, comprised of letters, numbers, and the special characters underscore (_), dot (.), and dash (-). Spaces are not allowed in the password.

Procedure

Follow these steps to log in for the first time:

Step 1 Open your browser and enter **http://a.b.c.d/Web**, where **a.b.c.d** is the IP address of the module. Be sure to enter **Web** with upper- and lowercase letters as shown here.

I

The Authentication window appears:



This window verifies that the user trying to log in is configured on the Cisco Unity Express system.

If you have just completed the initialization wizard, the **Authentication** window may appear to be unresponsive. The system may be updating the databases with the new users and system values; this process may take a few minutes.

- **Step 2** In the **User Name** field, enter the user ID of a user identified as an Cisco Unity Express administrator. This user ID is not the same as the user ID that started the initialization wizard. The user ID is case-sensitive; be sure to type the user ID with correct upper- and lowercase letters.
- **Step 3** Do one of the following:
 - If the system generates random passwords, tab to or click in the Password field and enter the password that was generated for you during the initialization procedure.
 - If the system does not generate random passwords, go to Step 4.

Step 4 Click Login.

If the user ID and password are correct, the **Password Expired** window appears:

	Password Expired	
	Your password has expired and you must change it now.	
	New password:	
CAN A	Confirm new password:	

- **Step 5** Do one of the following:
 - If you have a randomly generated password, enter it in the Current password field.
 - If the system does not generate random passwords, go to Step 6.
- **Step 6** In the New password field, enter your new password. Be sure to type the upper- and lowercase letters carefully.
- **Step 7** In the **Confirm new password** field, retype the password from Step 6.
- Step 8 Click Apply.

The Logged Out window appears:

	Logged Out You have successfully logged out of Cisco Unity Express To keep your session secure, close this browser window. Login again
--	---

Step 9 Click Login again to re-enter the system. Use your new password to access the GUI windows.

What to Do Next

After logging in to the system, see "Navigating Through the Cisco Unity Express GUI Windows" section on page 47.

Logging In to Cisco Unity Express

Logging in to Cisco Unity Express is very straightforward.

Note

If this is the first time you are logging in to the system, see "Logging In to Voice-Mail Administration for the First Time" on page 41.

Follow these steps to log in to Cisco Unity Express.

Step 1 Open your browser and enter **http://a.b.c.d/Web**, where **a.b.c.d** is the IP address of the module. Be sure to enter **Web** with upper- and lowercase letters as shown here.

The Authentication window appears:

Cisco Unity Express > Discover all that is	s possible on the Internet.	
Cisco Unity Express Voice M	ail / Auto Attendant	
	Authentication User Name: Password: Login	7004

- **Step 2** In the User Name field, enter your user ID. The user ID is case-sensitive; be sure to type the user ID with correct upper- and lowercase letters.
- **Step 3** In the **Password** field, enter your password. The password is case-sensitive; be sure to type the password with correct upper- and lowercase letters.

Step 4 Click Login.

If the user ID and password were entered correctly, the Home window appears:



All voice-mail administration activity uses the menus on this window. See "Navigating Through the Cisco Unity Express GUI Windows" on page 47 for a description of the different menus.

An error message appears if the username and password are incorrect and do not match the current authentication information on Cisco CME.

Note

If the system displays the **Lost Contact** screen, there may be network connectivity issues between Cisco Unity Express and the Cisco CME system.

The **Lost Contact** screen may also appear if the Cisco CME web administrator and password and the administrator username and password stored in the Cisco Unity Express database do not match. This could happen if, for example, the Cisco CME web administrator password is changed through the Cisco IOS command-line interface (CLI), but Cisco Unity Express is not updated.

To correct this problem, ensure that you have an enable password configured on Cisco CME. If not, Cisco Unity Express accepts any password even if it does not match the one configured with the telephony or telephony-service Cisco CME command.

Enter the correct Cisco CME hostname and IP address, username, and password. Enter the password again to confirm, and click **Apply**.

Logging Out of Cisco Unity Express

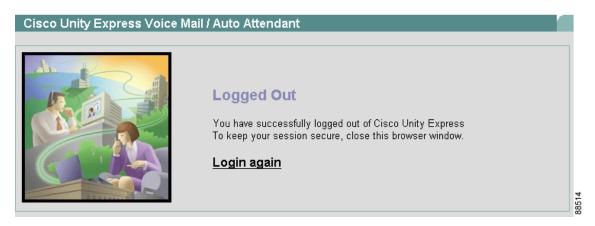
Log out of Cisco Unity Express when you finish your current set of tasks so that unauthorized personnel will not have access to the administration functions.

Follow these steps to log out of Cisco Unity Express.

- Step 1 Before logging out of the system, save changes to the windows on which you were working. (Use the Administration > Control Panel option to save your data.) Logging out does not automatically save new field entries.
- **Step 2** When you are ready to log out of Cisco Unity Express, go to the upper right corner of the Home window and click **Logout**.



The Logged Out window appears:



- **Step 3** Do one of the following:
 - Click Login again to re-enter the administration windows.
 - Close the application.



Cisco Unity Express Windows and Menus

This chapter describes the windows, menus, and icons available in the Cisco Unity Express voice-mail system and contains the following sections:

- Navigating Through the Cisco Unity Express GUI Windows, page 47
- Cisco Unity Express Windows and Menus, page 50
- Cisco Unity Express Icons, page 56
- What to Do Next, page 60

Navigating Through the Cisco Unity Express GUI Windows

The voice-mail software groups the administrative tasks on a main toolbar that includes several options, each with drop-down menus. Each of the menus leads you to windows where data can be selected or entered. For example:

<u>Configure</u> ▼ Voice Mail*	Y
Extensions	
Phones	
Users	
Groups	
Remote Users	
System Parameters	
CallManager Express	
	8
My Profile	12700

Clicking one of these options leads you to a window where data can be selected. For example:

L

88961

1 - 10 of 41 result(s)		
∆ <u>User ID</u>	Display Name	Primary Extension
🗖 gayle	gayle	
user1	user	5001
user12	user	5012
user13	user	5013
user14	user	5014
user15	user	5015
user16	user	5016
user18	user	5018
user19	user	5019
user20	user	5020

Clicking **Add** brings up a window where data can be entered. For example:

Cisco Unity Express 2.1/2.2 GUI Administrator Guide for Cisco CallManager Express

Add a New User	
SAdd 🗙 Cancel 😰	Help
User ID *:	
First Name *:	
Last Name *:	
Nick Name *:	
Display Name*:	
Primary E.164 Number:	
Associated Phone:	Add/Edit Remove
Primary Extension:	None
	O Other:
Language:	System Default
Password options:	Generate a random password 💌
Password:	
Confirm Password:	
PIN options:	Generate a random PIN 💌
PIN:	
Confirm PIN:	
🗖 Create Mailbox	
Forward CFNA & CFB	of extension (if configured) to Voice Mail number 5000
* indicates a mandatory fie	ld

Move to a fill-in field and click in the field, or use the Tab key on your keyboard.

These windows have icons that help with the task activity, such as saving data, adding or deleting an item, or finding a name or number. See "Cisco Unity Express Icons" on page 56 for a description of the icons.

After reviewing the icons, continue with "Sequence of Administrative Tasks" on page 61.

Cisco Unity Express Windows and Menus

The windows and menus are described in this section.

Home Window

The Home window appears when you first log in to Cisco Unity Express.



You can also access this window by clicking **Home** in the upper right corner of any Cisco Unity Express window.



Configure Menu

The Configure menu appears when you click Configure on the Home window.

<u>Configure</u> ▼ Voice Mail ▼
Extensions
Phones
Users
Groups
Remote Users
System Parameters
CallManager Express
g
My Profile

Table 9 describes the options on the Configure menu:

Table 9	Configure	Menu	Ontions
	oomiguic	menu	options

Menu Option	Description
Extensions	Add, modify, or delete an extension for a user.
Phones	Add, modify, or delete a telephone. Assign a telephone to an extension.
Users	Add, modify, or delete a user. Assign one or more extensions to a user.
Groups	Add, modify, or delete a group of users. Assign at least one user as the group owner.
Remote Users	Add, modify, or delete a user at a remote location. The remote location must be configured in the Cisco Unity Express database before using this option. See the Administration > Networking Locations option.
System Parameters	Modify system-wide parameters. Many of these values were configured during Cisco SME installation.
CallManager Express	Modify the Cisco CallManager Express hostname and SIP provider hostname that connect to Cisco Unity Express. This option also displays the web user name and password.
My Profile	Modify your name as it appears on other telephone displays, your password, and your PIN.

Voice Mail Menu

The Voice Mail menu appears when you click Voice Mail on the Home window.

Voice Mail ▼ Adminis	strat	tion 🔻	Defaults 🔻	r Re
Mailboxes				
Distribution Lists	Pu	blic Lis	sts	
Message Waiting	Му	Privat	e Lists	
Auto Attendant	Ot	her's P	rivate Lists	
Call Handling		Ci	sco Unity	Ехрг
Prompts		Ci	sco Syste	ms 2l
Scripts				
Business Hours Settings				8
Holiday Settings				127099

Table 10 describes the options on the Voice Mail menu:

Table 10 Voice Mail Menu Options

Menu Option	Description
Mailboxes	Add, modify, or delete a voice mailbox. Assign the mailbox to a user or to a group. Not all users or groups need to have an assigned voice mailbox.
Distribution Lists	Add, modify, or delete public or private distribution lists. Only members of the Administrators group or any group with the ViewPrivateList privilege and view private lists belonging to a specific user.
Message Waiting Indicators	Refresh the MWIs for one or more extensions or users. Modify the MWI On and MWI Off extensions, if necessary.
Auto AttendantConfigure one or more auto attendants.	
Call Handling	Modify the telephone number for dialing the voice-mail application, the voice-mail operator extension, and the maximum number of concurrent calls that the voice-mail and auto-attendant applications can handle.
Prompts	Configure prerecorded customized auto-attendant application prompts.
Scripts	Configure customized auto-attendant application scripts that have been created using the Cisco Unity Express script editor.
Business Hours SettingAdd, modify, or delete schedules of the days and times of t when the company is open for business s.	
Holiday Settings	Add or delete schedules of days when the company is closed for holidays.

Administration Menu

The Administration menu appears when you click Administration on the Home window.

Sync	iistration ▼ Defa hronize nation	ault:	s 🕶	Report	s 🔻	Help	
Back	up / Restore	Co	nfigu	Iration			
	ain Name	Sta	art B	ackup			
Settir	Ŭ l	· ·	art R	estore			
	ork Time & Time Settings		ty E:	xpress	Vers	sion 2	
Contr	ol Panel		tem	s 2004.	All	rights	
Trace	s						97
Netw	orking Locations						127097

Table 11 describes the options on the Administration menu:

Table 11 Administration Menu Options

Menu Option	Description	
Synchronize Information	Propagates changes to user and voice-mail information from the Cisco CallManager Express database to the Cisco Unity Express database.	
Backup/Restore	e Configure backup and restore parameters, and save Cisco Unity Express data and configuration changes to other locations, such as the FTP server. Restore saved files as needed.	
Domain Name Settings	Modify the hostname, domain name, and DNS server.	
Network Time & Time ZoneAdd or delete an NTP server, which is used for the dateSettingsCisco Unity Express. Change the local time zone.		
Control Panel	Save the Cisco CallManager data and the Cisco Unity Express data to flash memory or reload the Cisco Unity Express software.	
Traces	Set categories for generating trace data. Use this option for troubleshooting Cisco Unity Express.	
Networking Locations	Configure the local Cisco Unity Express ID and the parameters for any remote locations.	

Defaults Menu

The Defaults menu appears when you click **Defaults** on the Home window.

Defaults 🔻	Reports 🔻	He
User		
Mailbox		
Voice Mail		88403

Table 12 describes the options on the Defaults menu:

Menu Option	Description
User	Select the system-wide user password and PIN creation policy (system-generated or blank). The user modifies these values when logging in to the GUI or the voice-mail system for the first time.
Mailbox	Assign a system-wide mailbox size, maximum caller message size, and message expiry time. These apply to all new mailboxes. You can modify these values for specific mailboxes.
Voice Mail	Assign a total number of minutes allowed for all voice messages across the system and the maximum number of seconds for a user's outgoing mailbox greeting.

Table 12	Defaults Menu Options
----------	-----------------------

Reports Menu

The Reports menu appears when you click Reports on the Home window.

<u>Reports</u> ▼ Help▼	
Voice Mail	
System	
Backup History	
Restore History	
Network Time Protocol	103136

Table 13 describes the options on the Reports menu:

Table 13Reports Menu Options

Menu Option	Description	
Voice Mail	Displays statistics about the number of mailboxes configured, the number of messages and greeting, and the storage space on the system they use.	
System	Displays information about the system hardware and CPU.	
Backup History	Displays the backed-up files, backup dates, and success status.	
Restore History	Displays the restored files, restore dates, and success status.	
Network TIme Protocol	Displays the NTP servers and the time difference between the NTP server and the Cisco CallManager router clock.	

Help Menu

The Help menu appears when you click Help on the Home window.

<u>Help</u> 🔻	
About	1
Configuration	88494

Table 14 describes the options on the Help menu:

Menu Option	Description
	Displays the version of Cisco CallManager software and the licensing information for your Cisco Unity Express system.
Configuration	Displays help windows for configuring Cisco Unity Express.

Cisco Unity Express Icons

Table 15 describes the icons used on Cisco Unity Express windows:

Table 15Cisco Unity Express Icons

lcon	Purpose
	Click to add new users or to add users to groups.
Add	
	Click to add a new voice mailbox.
Add	
	Click to add a new extension.
Jan Add	
	Click to add a new DNS server.
Add	
	Click to add a new network location.
📥 村	
	Click to add a holiday to the company's schedule.
Add	
	Click to add a new business-hours schedule.
Add	
	Click to activate changed data. Data is saved using a Save icon or the Save Configuration option.
	in the same configuration option.
	Click to exit the active window. Data is not activated or saved.
X Cancel	Sur ou.
	Click to copy a schedule of business hours.
Copy schedule	

lcon	Purpose
X Delete	Click to delete a preselected user, extension, phone, voice mailbox, or group. Preselect the item by checking on the box to the left of the item.
Download	Click to download a personalized script or prompt from the auto attendant to another location.
<u>Find</u>	Click to find a user, voice mailbox, or group. A dialog box appears for entering the name to be found. See the procedure below for using this icon.
2 Help	Click to open a help window with information about the fields on the window.
🕵 Import	Click to import users from Cisco CallManager to Cisco Unity Express.
Refresh All	Click to refresh all message waiting indicators (MWIs).
@Refresh Selected	Click to refresh selected message waiting indicators (MWIs).
0-	Click to reset the values for an extension.
Leset	
	Click to reset the values for all extensions.
Le Reset All	
Save	Click to save the changes made on the active window or session.
Unlock	Click to unlock one or more mailboxes.

 Table 15
 Cisco Unity Express Icons (continued)

lcon	Purpose
企 Upload	Click to upload a personalized, prerecorded auto-attendant greeting file or script.
∕⊘ <u>∨erify</u>	Click to verify the connection between Cisco Unity Express and Cisco CallManager.

Table 15	Cisco Unity Express Icons	(continued)
----------	---------------------------	-------------

Searching for Data—the Find Icon

All the icons, except the **Find** icon, require one or two steps to complete their action. For the **Find** icon, a dialog box appears asking for a search pattern to locate the desired data. For example:

ind		
All fields are optional.		
User/Group ID:		
Name/Description:		
Extension:		
	~	
Search	88579	

You may enter a pattern in any one of the three fields. For example, you may enter a user's ID or the user's name or the user's extension. When you click the Search button, the system tries to find the user that matches the data you entered.

If you do not know the entire name, ID, or extension, you may use the asterisk (*) in place of missing characters. For example, entering a user ID of sm* causes the system to return a list of all users whose ID begins with sm. Similarly, if you enter an extension as *3, the system displays the names of all users whose extensions end with 3.

After the list of users is displayed, you may choose an entry by checking on the check box next to the name. The software uses this choice in the data entry window where you invoked the Find icon.

Alphabetizing Data—the Sort Icon

Windows that list a series of users, extensions, or phones can be sorted in ascending or descending order. A triangle next to a column title indicates which column was used most recently for sorting and the direction in which the data is sorted. Any column may be used for sorting. For example,

S Add X Delete Pind PHelp			
	1 - 10 of 41 result(s)	Display Name	Primary Extension
	gayle	gayle	
	user1	user	5001
	user12	user	5012
	user13	user	5013
	user14	user	5014
	user15	user	5015
	user16	user	5016
	<u>user18</u>	user	5018
	<u>user19</u>	user	5019
	user20	user	5020

Configure > Users

1 - 10 of 41 result(s)		
□ ∇ <u>User ID</u>	Display Name	Primary Extension
🗖 user8	user	
🗖 user7	user	5007
🗖 user6	user	5006
🗖 user5	user	5005
🗖 user48	user	5048
user47	user	5047
🗖 user46	user	5046
user45	user	5045
user44	user	5044
□ user41	user	5041

Clicking the column title sorts the list entries in reverse order.



Reversing the order is handy if the list of names is too long to fit on the window and you want to look at an entry at the end of the list.

What to Do Next

See the chapter "Sequence of Administrative Tasks" on page 61 for a list of administrative tasks.



Sequence of Administrative Tasks

After the prerequisite activities are completed, the administrative tasks can begin. You will do some tasks once, others regularly, and others as needed.

Online Help

For all these configuration tasks, online help windows are available with information and guidance. Look for the **Help** icon on each window to access these help windows.

Initial Tasks

Do the tasks listed in Table 16 to set up Cisco Unity Express:

Table 16	Initial Configuration Tasks
----------	-----------------------------

Tas	sk	Menu Option	
1.	Upload customized prompts and greetings. Alternatively, use the Administration via Telephone (AVT) system on the TUI to record the prompts.	Choose Voice Mail > Prompts.	
2.	Upload customized scripts. To create the scripts, use the script editor described in the <i>Cisco Unity Express</i> <i>Script Editor Guide</i> .	Choose Voice Mail > Scripts.	
3.	Configure the auto-attendant application.	Choose Voice Mail > Auto Attendant.	
4.	If extensions have not been configured, configure them.	Choose Configure > Extensions .	
5.	If users and groups have not been configured, configure them.	Choose Configure > Users and Configure > Groups .	
6.	Configure individual and general delivery voice mailboxes.	Choose Voice Mail > Mailboxes.	

Tas	k	Menu Option
7.	If using a network, configure network locations.	Choose Administration > Networking Locations.
8.	(Optional) Add remote users to the local directory.	Choose Config > Remote Users .
9.	(Optional) Create public distribution lists.	Choose Voice Mail > Distribution Lists.
10.	(Optional) Configure LRU cache.	Available through CLI commands.
11.	(Optional) Configure vCard information receipt.	Available through CLI commands
12.	(Optional) Configure broadcast message senders.	Choose Configure > Users .
13.	(Optional) Configure holiday schedules.	Choose Voice Mail > Holiday Settings.
14.	(Optional) Configure business hours.	Choose Voice Mail > Business Hours Settings.

 Table 16
 Initial Configuration Tasks (continued)

Ongoing Tasks

Do the tasks listed in Table 17 on a regular basis.

 Table 17
 Ongoing Administrative Tasks

Task	Menu Option
Back up and restore system data.	Choose Administration > Backup/Restore.
Monitor system status.	Choose Reports . Review all the reports periodically.

As-Needed Tasks

Do the tasks listed in Table 18 on an as-needed basis.

Table 18 As-Needed Administrative Tasks

Task	Menu Option
Add, display, modify, and delete voice mailboxes.	Choose Voice Mail > Mailboxes.
Unlock a voice mailbox.	Choose Voice Mail > Mailboxes and the Unlock icon.
Add, display, modify, and delete users.	Choose Configure > Users .
Add, display, modify, and delete groups.	Choose Configure > Groups .
Change a user's voice-mail password.	Choose Configure > Users and the user ID that needs to be changed.

Task	Menu Option
Change the voice mailbox size or storage time.	Choose Defaults > Mailbox to change the value system-wide. Choose Configure > Users and the user ID to change the value for a specific user.
Change password or PIN length.	Choose Defaults > User .
Change password or PIN expiry time.	Choose Defaults > User .
Add, display, modify and delete extensions and telephones.	Choose Configure > Extensions and Configure > Phones .
Assign an extension to another user.	Choose Configure > Extensions.
Modify the auto-attendant application properties.	Choose Voice Mail > Auto Attendant.
Add, modify, and delete the auto-attendant prompts.	Choose Voice Mail > Prompts and see "Recording an Auto-Attendant Greeting or Prompt File" on page 14.
Add, modify, and delete the auto-attendant scripts.	Choose Voice Mail > Scripts and see "Configuring Auto-Attendant Scripts" on page 15.
Troubleshoot software problems.	See the chapter ""Troubleshooting Cisco Unity Express" on page 65.

 Table 18
 As-Needed Administrative Tasks



Troubleshooting Cisco Unity Express

This chapter contains the following troubleshooting procedures:

- IP Addressing Problems, page 65
- Backup or Restore Not Working, page 65
- Installation Not Working Correctly, page 66
- Incorrect Date and Time, page 66
- MWI Lights Not Working Properly, page 66
- Configurations Disappear, page 66
- Wrong GUI Layout, page 67
- Auto-Attendant Prompts, page 67

IP Addressing Problems

Problem: I cannot ping the Cisco Unity Express module.

Explanation The IP address of the host server is missing or wrong.

Recommended Action Choose **Administration > Domain Name Settings** to configure the host server.

Explanation The wrong module or gateway is configured.

Backup or Restore Not Working

Problem: The backup or restore file is not loading correctly.

Recommended Action Verify that the correct FTP server is configured. Choose Administration > Backup/Restore > Configuration.

Recommended Action Verify that the correct DNS server is configured. Choose Administration > Domain Name Settings.

Installation Not Working Correctly

Problem: The installation is not loading correctly.

Recommended Action Verify that the correct FTP server is configured. Choose Administration > Backup/Restore > Configuration.

Recommended Action Verify that the correct DNS server is configured. Choose Administration > Domain Name Settings.

Incorrect Date and Time

Problem: The date and time on the system are not correct.

Recommended Action Verify that the correct NTP server is configured. Choose Administration > Network Time & Time Zone Settings.

Recommended Action Verify that the correct time zone is configured. Choose Administration > Network Time & Time Zone Settings.

MWI Lights Not Working Properly

Problem: The MWI lights do not go on when messages are stored in a user's mailbox.

Recommended Action Refresh the MWI lights for the user. Choose **Voice Mail > Message Waiting Indicators > Refresh**.

Recommended Action Check that the user's extension is designated as a primary extension. Cisco Unity Express does not send a MWI to an E.164 number. Choose **Configure > Users** to designate a primary extension.

Configurations Disappear

Problem: I configured voice-mail or auto-attendant parameters, but I do not see them in the current Cisco Unity Express configuration.

Explanation You did not click the **Apply** icon in the GUI to save the changes.

Explanation You made changes using CLI commands to the Cisco CallManager server or Cisco CME router, but Cisco Unity Express did not pick them up.

Recommended Action (For Cisco CME only) Choose **Administration > Synchronize Information** to synchronize the Cisco CallManager and Cisco Unity Express databases.

Explanation You made changes to the running configuration that were not saved to the startup configuration.

Recommended Action Choose **Administration > Save Configuration** to load the startup configuration.

Wrong GUI Layout

Problem: When I log in to the GUI, I see a limited set of options, not the full administration windows.

Explanation Another administrator is logged in. Only one administrator can access the administration GUI at a time.

Recommended Action Find out who is logged in and log that person out or wait a few minutes for the inactivity timer to log that person out.

Auto-Attendant Prompts

Problem: The custom auto-attendant prompt is not working.

Recommended Action Verify that the prompt format is CCITT G.711 u-law, 8kHz, 8-bit, Mono.

Γ





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2. [2]Bernd Altmeier <a href="mailto: hopf Elektronik serial line and PCI-bus devices">PCI-bus devices

3. [3]Viraj Bais <vbais@mailman1.intel.com> and [4]Clayton Kirkwood <kirkwood@striderfm.intel.com> port to WindowsNT 3.5

4. [5]Michael Barone <michael,barone@lmco.com> GPSVME fixes

5. [6]Karl Berry <karl@owl.HQ.ileaf.com> syslog to file option

6. [7]Greg Brackley <greg.brackley@bigfoot.com> Major rework of WINNT port. Clean up recvbuf and iosignal code into separate modules.

7. [8]Marc Brett <Marc.Brett@westgeo.com> Magnavox GPS clock driver

8. [9]Piete Brooks <Piete.Brooks@cl.cam.ac.uk> MSF clock driver, Trimble PARSE support

9. [10]Reg Clemens <reg@dwf.com> Oncore driver (Current maintainer)

10. [11]Steve Clift <clift@ml.csiro.au> OMEGA clock driver

11. [12]Casey Crellin <casey@csc.co.za> vxWorks (Tornado) port and help with target configuration

12. [13]Sven Dietrich <sven_dietrich@trimble.com> Palisade reference clock driver, NT adj. residuals, integrated Greg's Winnt port.

13. [14] John A. Dundas III <dundas@salt.jpl.nasa.gov> Apple A/UX port

14. [15]Torsten Duwe <duwe@immd4.informatik.uni-erlangen.de> Linux port

15. [16]Dennis Ferguson <dennis@mrbill.canet.ca> foundation code for NTP Version 2 as specified in RFC-1119

16. [17]Glenn Hollinger <glenn@herald.usask.ca> GOES clock driver

17. [18]Mike Iglesias <iglesias@uci.edu> DEC Alpha port

18. [19]Jim Jagielski <jim@jagubox.gsfc.nasa.gov> A/UX port

19. [20]Jeff Johnson <jbj@chatham.usdesign.com> massive prototyping overhaul

20. [21]Hans Lambermont </ data and a comparison of the second se

21. [23]Poul-Henning Kamp <phk@FreeBSD.ORG> Oncore driver (Original author)

22. [24]Frank Kardel [25]<Frank.Kardel@informatik.uni-erlangen.de> PARSE <GENERIC> driver (14 reference clocks), STREAMS modules for PARSE, support scripts, syslog cleanup

23. [26]William L. Jones <jones@hermes.chpc.utexas.edu> RS/6000 AIX modifications, HPUX modifications

24. [27]Dave Katz <dkatz@cisco.com> RS/6000 AIX port

25. [28]Craig Leres <leres@ee.lbl.gov> 4.4BSD port, ppsclock, Magnavox GPS clock driver

26. [29]George Lindholm <lindholm@ucs.ubc.ca> SunOS 5.1 port

27. [30]Louis A. Mamakos <louie@ni.umd.edu> MD5-based authentication

28. [31]Lars H. Mathiesen <thorinn@diku.dk> adaptation of foundation code for Version 3 as specified in RFC-1305

29. [32]David L. Mills <mills@udel.edu> Version 4 foundation: clock discipline, authentication, precision kernel; clock drivers: Spectracom, Austron, Arbiter, Heath, ATOM, ACTS, KSI/Odetics; audio clock drivers: CHU, WWV/H, IRIG

30. [33]Wolfgang Moeller <moeller@gwdgv1.dnet.gwdg.de> VMS port

31. [34]Jeffrey Mogul <mogul@pa.dec.com> ntptrace utility

32. [35]Tom Moore <tmoore@fievel.daytonoh.ncr.com> i386 svr4 port

33. [36]Kamal A Mostafa <kamal@whence.com> SCO OpenServer port

34. [37]Derek Mulcahy <derek@toybox.demon.co.uk> and [38]Damon Hart-Davis <d@hd.org> ARCRON MSF clock driver

35. [39]Rainer Pruy <Rainer.Pruy@informatik.uni-erlangen.de> monitoring/trap scripts, statistics file handling

36. [40]Dirce Richards <dirce@zk3.dec.com> Digital UNIX V4.0 port

37. [41]Wilfredo Sánchez <wsanchez@apple.com> added support for NetInfo

38. [42]Nick Sayer <mrapple@quack.kfu.com> SunOS streams modules

39. [43]Jack Sasportas <jack@innovativeinternet.com> Saved a Lot of space on the stuff in the html/pic/ subdirectory

40. [44]Ray Schnitzler <schnitz@unipress.com> Unixware1 port

41. [45]Michael Shields <shields@tembel.org> USNO clock driver

42. [46]Jeff Steinman <jss@pebbles.jpl.nasa.gov> Datum PTS clock driver

43. [47]Harlan Stenn <harlan@pfcs.com> GNU automake/autoconfigure makeover, various other bits (see the ChangeLog)

44. [48]Kenneth Stone <ken@sdd.hp.com> HP-UX port

45. [49]Ajit Thyagarajan <ajit@ee.udel.edu>IP multicast/anycast support

46. [50]Tomoaki TSURUOKA <tsuruoka@nc.fukuoka-u.ac.jp>TRAK clock driver

47. [51]Paul A Vixie <vixie@vix.com> TrueTime GPS driver, generic TrueTime clock driver

48. [52]Ulrich Windl <Ulrich.Windl@rz.uni-regensburg.de> corrected and validated HTML documents according to the HTML DTD

[53]gif

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- 38. mailto:d@hd.org
- 39. mailto:Rainer.Pruy@informatik.uni-erlangen.de
- 40. mailto:dirce@zk3.dec.com
- 41. mailto:wsanchez@apple.com
- 42. mailto:mrapple@quack.kfu.com
- 43. mailto:jack@innovativeinternet.com
- 44. mailto:schnitz@unipress.com
- 45. mailto:shields@tembel.org
- 46. mailto:pebbles.jpl.nasa.gov
- 47. mailto:harlan@pfcs.com
- 48. mailto:ken@sdd.hp.com
- 49. mailto:ajit@ee.udel.edu
- 50. mailto:tsuruoka@nc.fukuoka-u.ac.jp
- 51. mailto:vixie@vix.com
- 52. mailto:Ulrich.Windl@rz.uni-regensburg.de
- 53. file://localhost/backroom/ntp-stable/html/index.htm
- 54. mailto:mills@udel.edu

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