Overview of Cisco Unity Express Software Installation

Last updated: December 21, 2006

This guide describes the set of Cisco Unity Express command-line interface (CLI) commands and graphical user interface (GUI) options for installing and upgrading the Cisco Unity Express software.

Use the tasks and procedures in this guide before performing the administrative tasks described in the *Cisco Unity Express 2.3 CLI Administrator Guide* and *Cisco Unity Express 2.3 GUI Administrator Guide*.

The focus of this guide is the Cisco Unity Express installation. It does not provide information on installation of Cisco routers, Cisco network modules, the Cisco Unified CallManager server, or the Cisco Unified CallManager Express (Cisco Unified CME) router. For more information about those topics, see "Additional References" on page 7.

This chapter contains the following sections:

Checklist for New Software Installations

A new Cisco Unity Express installation requires the following procedures:

Checklist	Checkoff
1. Review the prerequisites for your system to prepare for the Cisco Unity Express installation. See "Prerequisites for Installing Cisco Unity Express Software" on page 13.	❑
2. Follow the instructions to activate the IP link between the Cisco Unity Express module and your call platform. See "Installing Cisco Unity Express Software on a New System" on page 23.	❑
3. Run the initialization wizard to populate the Cisco Unity Express database with system-wide parameters and an initial set of subscribers. See *Cisco Unity Express 2.3 GUI Administrator Guide*.	❑
4. Configure other components and subscribers. See the *Cisco Unity Express 2.3 CLI Administrator Guide* and the *Cisco Unity Express 2.3 GUI Administrator Guide*.	❑

Types of Cisco Unity Express Software Upgrades

Several processes are available for upgrading Cisco Unity Express software. Choosing a process depends on the type of upgrade required.

- Upgrade installation—Upgrade using the online installer with the **software install upgrade** command. This process is available for upgrading from the previous software release to the current one.

  Note This upgrade method is not supported in Cisco Unity Express 2.3.1.

- Clean installation—Upgrade using the online installer with the **software install clean** command. This installation process is available for upgrading licenses and for upgrading software releases later than 2.0 to the current one.

  Using this process, the system remains operational while the new software files are downloaded in the background. For a new license, you must back up and restore configuration files; for a new software image, you must back up and restore both configuration and data files. Only an FTP server is required. See "Upgrading the Cisco Unity Express License" on page 49 or "Upgrading From an Earlier Cisco Unity Express Release" on page 33 for more details.

- Clean installation with the boot helper—Upgrade using the boot helper with the **software install clean** command. This clean installation process is available for upgrading licenses, upgrading software releases prior to 2.0.1 to the current release, and when the other upgrade processes are unsuccessful.

  Using this process, the system must be offline while the new software files are downloaded. This installation erases and repartitions the disk before loading the new files on the disk. You must back up and restore your configuration and data files. Both an FTP and a TFTP server are required. See "Upgrading Using the Boot Helper" on page 41.

Software Upgrade Process

For a complete list of releases and the upgrade processes available for them, see the software upgrade process matrix in the *Release Notes for Cisco Unity Express 2.3*.

Caution Cisco Unity Express 2.3 does not support versions of Cisco Unified CallManager prior to 4.1. If you are using an earlier version of Cisco Unified CallManager, you must upgrade to version 4.1 or higher to interoperate with Cisco Unity Express 2.3.

Upgrading an existing Cisco Unity Express system requires the following procedures:

1. Follow the appropriate upgrade process.
2. If necessary, run the initialization wizard. See the *Cisco Unity Express 2.3 GUI Administrator Guide* for the procedure to run the initialization wizard.
3. Configure new features, if appropriate. See the *Cisco Unity Express 2.3 CLI Administrator Guide* or the *Cisco Unity Express 2.3 GUI Administrator Guide*.

Platforms and Cisco IOS Software Images

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

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

See the *Release Notes for Cisco Unity Express Release 2.3* for detailed information about the Cisco Unity Express hardware and software platforms.

Uninterruptible Power Supply Recommendations

We highly recommend attaching an uninterruptible power supply (UPS) to the router that houses 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.

Differences Between the AIM and the NM

Cisco Unity Express is supported on both the advanced integration module (AIM) and the network module (NM). Cisco Unity Express features work the same way on both modules with the following exceptions:

- The AIM is a 4-port module with 1GB flash memory that stores a maximum of 50 voice mailboxes and 14 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.
- The AIM and NM support different capacities for scripts and prompts. See "Software Licenses and Factory-Set Limits" section on page 4 for these capacities.

Software Licenses and Factory-Set Limits

The following system capacity increases are available starting with Cisco Unity Express 2.3.

- Number of voice mailboxes—The NM-CUE-EC supports new licenses for 150, 200, and 250 voice mailboxes. Each new license size supports 25 general delivery mailboxes (GDMs).
- Voice-mail storage capacity—Voice-mail storage is increased from 100 hour to 300 hours on the NM-CUE-EC, regardless of license size.
- Number of remote subscribers—The number of remote subscribers is increased from 50 to 100 on the NM-CUE-EC.
- Number of cached users—The number of subscribers cached in the LRU is increased from 50 to 100 on the NM-CUE-EC.
- Number of public distribution lists—The number of public distribution lists is increased from 15 to 25 on the NM-CUE-EC.
- Number of custom prompts—The number of custom prompts that can be recorded, uploaded, and stored on the system is increased from 50 to 120 on the NM-CUE and NM-CUE-EC.

Factory-set system limits are determined by the ordered license.

Cisco Unity Express supports a maximum of 8 SIP triggers and 8 JTAPI triggers for all applications combined. This applies to both the NM and the AIM.

Table 1 and Table 2 list the system limits for the NM-CUE-EC.

Table 3 and Table 4 list the system limits for the NM-CUE.

Table 5 and Table 6 list the system limits for the AIM-CUE.

Table 1 NM-CUE-EC System Capacities for Mailboxes, Storage Hours, Ports, Scripts, and Prompts

Cisco Unity Express License/Software SKU	Total Mailbox Storage (Hours)	Default Mailbox Size (Seconds)[1]	Number of Concurrent VoiceMail and Auto Attendant Ports/Sessions	Number of Scripts	Number of Prompts	Number of Public Distribution Lists
SCUE-LIC-12CCM SCUE-LIC-12CME	300	63529	16	8	120	25
SCUE-LIC-25CCM SCUE-LIC-25CME	300	36000	16	8	120	25
SCUE-LIC-50CCM SCUE-LIC-50CME	300	16115	16	8	120	25
SCUE-LIC-100CCM SCUE-LIC-100CME	300	9600	16	8	120	25
SCUE-LIC-150CCM SCUE-LIC-150CME	300	6171	16	8	120	25
SCUE-LIC-200CCM SCUE-LIC-200CME	300	4800	16	8	120	25
SCUE-LIC-250CCM SCUE-LIC-250CME	300	3297	16	8	120	25

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

Table 2 NM-CUE-EC Maximum Number of Mailboxes, Users, Groups, Owners, and Members

Cisco Unity Express License/Software SKU	Default Number of Personal Mailboxes	Default Number of General Delivery Mailboxes	Total Number of Mailboxes	Number of Users	Number of Groups	Number of Owners	Number of Members
SCUE-LIC-12CCM SCUE-LIC-12CME	12	5	17	24	20	400	880
SCUE-LIC-25CCM SCUE-LIC-25CME	25	10	35	50	20	400	1000
SCUE-LIC-50CCM SCUE-LIC-50CME	50	15	65	100	30	400	1000
SCUE-LIC-100CCM SCUE-LIC-100CME	100	20	120	200	40	400	1000
SCUE-LIC-150CCM SCUE-LIC-150CME	150	25	175	300	40	400	1000
SCUE-LIC-200CCM SCUE-LIC-200CME	200	25	225	300	40	400	1000
SCUE-LIC-250CCM SCUE-LIC-250CME	250	25	275	300	40	400	1000

Table 3 NM-CUE System Capacities for Mailboxes, Storage Hours, Ports, Scripts, and Prompts

Cisco Unity Express License/Software SKU	Total Mailbox Storage (Hours)	Default Mailbox Size (Seconds)[1]	Number of Concurrent VoiceMail and Auto Attendant Ports/Sessions	Number of Scripts	Number of Prompts	Number of Public Distribution Lists
SCUE-LIC-12CCM SCUE-LIC-12CME	100	21120	8	8	120	15
SCUE-LIC-25CCM SCUE-LIC-25CME	100	10260	8	8	120	15
SCUE-LIC-50CCM SCUE-LIC-50CME	100	5520	8	8	120	15
SCUE-LIC-100CCM SCUE-LIC-100CME	100	3000	8	8	120	15

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

Table 4 NM-CUE Maximum Number of Mailboxes, Users, Groups, Owners, and Members

Cisco Unity Express License/Software SKU	Default Number of Personal Mailboxes	Default Number of General Delivery Mailboxes	Total Number of Mailboxes	Number of Users	Number of Groups	Number of Owners	Number of Members
SCUE-LIC-12CCM SCUE-LIC-12CME	12	5	17	24	20	400	880
SCUE-LIC-25CCM SCUE-LIC-25CME	25	10	35	50	20	400	1000
SCUE-LIC-50CCM SCUE-LIC-50CME	50	15	65	100	30	400	1000
SCUE-LIC-100CCM SCUE-LIC-100CME	100	20	120	200	40	400	1000

Table 5 1-GB AIM-CUE System Capacities for Mailboxes, Storage Hours, Ports, Scripts, and Prompts

Cisco Unity Express License/Software SKU	Total Mailbox Storage (Hours)[1]	Default Mailbox Size (Seconds)[2]	Number of Concurrent VoiceMail and Auto Attendant Ports/Sessions	Number of Scripts	Number of Prompts	Number of Public Distribution Lists
SCUE-LIC-12CCM SCUE-LIC-12CME	14	2700	4 (Cisco 2600XM, Cisco 2691) 6 (Cisco 2800 series, Cisco 3700 series, Cisco 3800 series)	4	25	15
SCUE-LIC-25CCM SCUE-LIC-25CME	14	1320	4 (Cisco 2600XM, Cisco 2691) 6 (Cisco 2800 series, Cisco 3700 series, Cisco 3800 series)	4	25	15
SCUE-LIC-50CCM SCUE-LIC-50CME	14	720	4 (Cisco 2600XM, Cisco 2691) 6 (Cisco 2800 series, Cisco 3700 series, Cisco 3800 series)	4	25	15

1. Cisco Unity Express 2.3 does not support the 512 MB AIM-CUE.
2. The default mailbox size calculation includes the allocation for the General Delivery Mailboxes (GDMs).

Table 6 1-GB AIM-CUE Maximum Number of Mailboxes, Groups, Owners, and Members

Cisco Unity Express License/Software SKU	Default Number of Personal Mailboxes	Default Number of General Delivery Mailboxes	Total Number of Mailboxes	Number of Users	Number of Groups	Number of Owners	Number of Members
SCUE-LIC-12CCM SCUE-LIC-12CME	12	5	17	24	20	100	200
SCUE-LIC-25CCM SCUE-LIC-25CME	25	10	35	50	20	100	200
SCUE-LIC-50CCM SCUE-LIC-50CME	50	15	65	100	20	100	200

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 2.3 CLI Administrator Guide* • *Cisco Unity Express 2.3 GUI Administrator Guide* • *Cisco Unity Express 2.3 Command Reference* • *Cisco Unity Express 2.3 Installation and Upgrade Guide* • *Cisco Unity Express AvT Administrator Guide* • *Release Notes for Cisco Unity Express 2.3*
Cisco Unity Express voice-mail scripts	*Cisco Unity Express 2.3 Guide to Writing Auto-Attendant Scripts*
Cisco Unity Express voice-mail subscriber information	*Cisco Unity Express User Guides*
Cisco modules hardware installation	• *AIM Installation Quick Start Guide: Cisco 2600, 3600, and 3700 Series*
Cisco Unity Express software copyrights and licenses	*Cisco Unity Express Software Copyrights and Licenses*
Technical support documentation for Cisco Unity Express	*Cisco Unity Express Troubleshoot and Alerts*

Related Topic	Document Title
Cisco Unified CallManager	5.0.4 • *Cisco Unified CallManager Administration Guide, Release 5.0(4)* • *Cisco Unified CallManager System Guide, Release 5.0(4)* • *Cisco Unified CallManager Features and Services Guide, Release 5.0(4)* 5.0(2): • *Cisco Unified CallManager Administration Guide, Release 5.0(2)* • *Cisco Unified CallManager System Guide, Release 5.0(2)* • *Cisco Unified CallManager Features and Services Guide, Release 5.0(2)* 5.0(1): • *Cisco Unified CallManager Administration Guide, Release 5.0(1)* • *Cisco Unified CallManager System Guide, Release 5.0(1)* • *Cisco Unified CallManager Features and Services Guide, Release 5.0(1)* 4.2(1): • *Cisco Unified CallManager Administration Guide, Release 4.2(1)* • *Cisco Unified CallManager System Guide, Release 4.2(1)* • *Cisco Unified CallManager Features and Services Guide, Release 4.2(1)* 4.1(3) • *Cisco Unified CallManager Administration Guide, Release 4.1(3)* • *Cisco Unified CallManager System Guide, Release 4.1(3)* • *Cisco Unified CallManager Features and Services Guide, Release 4.1(3)* 4.1(2): • *Cisco Unified CallManager Administration Guide, Release 4.1(2)* • *Cisco Unified CallManager System Guide, Release 4.1(2)* • *Cisco Unified CallManager Features and Services Guide, Release 4.1(2)*

Related Topic	Document Title
Cisco Unified CallManager Express	4.0: • *Cisco Unified CallManager Express System Administrator Guide* • *Cisco Unified CallManager Express Command Reference* 3.4: • *Cisco CallManager Express 3.4 Configuration Guide* • *Cisco CallManager Express 3.4 Command Reference* 3.3: • *Cisco CallManager Express 3.3 System Administrator Guide* • *Cisco CallManager Express 3.3 Command Reference*
Cisco hardware platforms	• *Cisco 2600 Series Hardware Installation Guide* • *Cisco 2800 Series Hardware Installation* • *Cisco 3700 Series Hardware Installation 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, see the *Cisco IOS Voice Configuration Library, Release 12.4*.
Cisco IOS voice troubleshooting information	*Cisco IOS Voice Troubleshooting and Monitoring Guide*

MIBs

MIBs	MIBs Link
• CISCO-UNITY-EXPRESS-MIB • CISCO-VOICE-CONNECTIVITY-MIB • CISCO-VOICE-APPLICATIONS-OID-MIB • CISCO-PROCESS-MIB • SNMPv2-MIB • IF-MIB • IP-MIB • SYSAPPL-MIB	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*
2833	*RTP Payloads for DTMF Digits, Telephony Tones and Telephony Signals*
3261	*SIP: Session Initiation Protocol*
3501	*Internet Message Access Protocol - Version 4rev1*

Technical Assistance

Description	Link
The Cisco Technical Support & Documentation website contains thousands of 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/techsupport