



Preface

This preface describes the purpose, audience, and conventions of the *Cisco Unity Express GUI Administrator Guide for CallManager*, and provides information on obtaining related documentation and technical assistance.

Purpose

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

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

The focus of this book is the Cisco Unity Express application. It does not provide information on installation of Cisco routers, Cisco network modules, or the Cisco CallManager server. For more information about those topics, see [“Additional References” on page 36](#).

Audience

This guide is intended for installers, resellers, system administrators, and technical assistance personnel who are responsible for managing Cisco Unity Express applications using Cisco CallManager.

You will need a working knowledge of Microsoft Internet Explorer Version 6.0 or later. Experience with Cisco IOS software is not required.

Document Conventions

This guide uses the following conventions:

Table 1 Cisco Unity Express GUI Administrator Guide for CallManager Conventions

| Convention | Description |
|--|--|
| boldface text | Boldface text is used for: <ul style="list-style-type: none"> Keyboard buttons. (Example: Press Esc.) Information that you enter. (Example: Enter administrator in the User ID field.) |
| plain bold text | Plain bold text is used for: <ul style="list-style-type: none"> Text shown on a GUI screen. (Example: User Name) Keys and buttons on a GUI screen. (Example: Click Add.) |
| <u>plain bold and underlined text</u> | <u>Plain bold and underlined text</u> is used to represent icons or buttons on a GUI screen (for example, Click <u>Apply</u>). |
| screen | Examples of information displayed on the screen are set in Courier font. |
| - (hyphen) | Hyphens separate keys that must be pressed simultaneously. (Example: Press Ctrl-Alt-Delete .) |
| > (right angle bracket) | A right angle bracket is used to separate selections that you make on the administration screens. (Example: From the Home menu, click Configure > Users .) |

The *Cisco Unity Express GUI Administrator Guide for CallManager* also uses the following conventions:



Note

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the document.



Caution

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.



Timesaver

Means *the described action saves time*. You can save time by performing the action described in the paragraph.



Tip

Means *the following information will help you solve a problem*. The tips information might not be troubleshooting or even an action, but could be useful information, similar to a Timesaver.

Obtaining Documentation

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<http://tools.cisco.com/RPF/register/register.do>

Opening a TAC Case

Using the online TAC Case Open Tool is the fastest way to open P3 and P4 cases. (P3 and P4 cases are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Case Open Tool automatically recommends resources for an immediate solution. If your issue is not resolved using the recommended resources, your case will be assigned to a Cisco TAC engineer. The online TAC Case Open Tool is located at this URL:

<http://www.cisco.com/tac/caseopen>

For P1 or P2 cases (P1 and P2 cases are those in which your production network is down or severely degraded) or if you do not have Internet access, contact Cisco TAC by telephone. Cisco TAC engineers are assigned immediately to P1 and P2 cases to help keep your business operations running smoothly.

To open a case by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553-2447

For a complete listing of Cisco TAC contacts, go to this URL:

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To ensure that all cases are reported in a standard format, Cisco has established case priority definitions.

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

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PCRE is a library of functions to support regular expressions whose syntax and semantics are as close as possible to those of the Perl 5 language.

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